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BOROUGH OF POOLE



# Annual Report

FOR 1933

ON THE

## Health and Sanitary

## Circumstances

## of the Borough

BY

R. J. MAULE HORNE,

M.A., M.B., Ch.B., B.Sc., D.P.H.,  
MEDICAL OFFICER OF HEALTH,  
SCHOOL MEDICAL OFFICER,  
PORT MEDICAL OFFICER,  
ETC.



Borough and County of Town of Poole.



# ANNUAL REPORT

For the Year 1933

ON THE

HEALTH AND SANITARY  
CIRCUMSTANCES OF THE  
BOROUGH & PORT OF POOLE

AND OF THE

SCHOOL MEDICAL SERVICE  
OF THE BOROUGH

BY

**R. J. MAULE HORNE,**

M.A. (HONS.), M.B., Ch.B., B.Sc., D.P.H.

Medical Officer of Health    School Medical Officer  
Port Medical Officer

Medical Superintendent, Borough Isolation Hospitals

Medical Officer for Maternity and Child Welfare

Director, Public Health Laboratories.

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- PART I ... PUBLIC HEALTH.  
PART II ... PORT SANITATION.  
PART III ... MATERNITY AND CHILD WELFARE.  
PART IV ... SCHOOL MEDICAL SERVICE.



## COMMITTEES, 1933.

### PUBLIC HEALTH AND PORT SANITARY COMMITTEE.

THE WORSHIPFUL THE MAYOR :  
COUNCILLOR W. C. J. SHORTT.

*Chairman :*

COUNCILLOR W. J. STICKLAND.

*Vice-Chairman :*

COUNCILLOR MISS C. H. J. PATERSON, J.P.

*Aldermen :*

F. J. BACON, J.P.

J. C. W. JULYAN, J.P.

*Councillors :*

J. BRIGHT.

W. G. FRY.

D. A. HAYNES.

W. G. HECKFORD.

W. A. JARMAN.

F. C. REEVES.

H. Y. SALKELD, D.S.O.

L. A. TAWNEY.

### MATERNITY AND CHILD WELFARE COMMITTEE.

THE WORSHIPFUL THE MAYOR :  
COUNCILLOR W. C. J. SHORTT.

*Chairman :*

COUNCILLOR H. Y. SALKELD.

*Vice-Chairman :*

MRS. L. H. ROBERTS.

*Members :*

ALDERMAN J. C. W. JULYAN, J.P.

*COUNCILLORS :*

H. BEST.

R. H. MILLEDGE.

MISS C. H. J. PATERSON.

L. A. TAWNEY.

*Co-opted Members :*

REV. R. FAWKES.

MRS. SANSOM.

MRS. TATHAM.

MRS. ROBERTS.

### EDUCATION COMMITTEE.

*Chairman :*

ALDERMAN H. S. CARTER, J.P.

*Vice-Chairman :*

COUNCILLOR H. J. COLE.

*Aldermen :*

F. J. BACON, J.P.

A. E. F. CORNWELL.

J. C. W. JULYAN, J.P.

*Councillors :*

W. H. CRABB.

W. A. JARMAN.

A. H. JOHNSTON, J.P.

W. C. J. SHORTT.

A. W. WELFORD.

*Co-opted Members :*

MISS BARKER.

MISS BUDGE.

MISS JEFFERYS.

H. W. HICKS.

J. STANLEY LITTLE.

E. LACK.

REV. P. D. LEAHY.

J. W. WHITE.

# STAFF :

Medical Officer of Health	...§R. J. MAULE HORNE, M.A. (Hons.), M.B., Ch.B., B.Sc., D.P.H.
Deputy Medical Officer of Health	...†G. CHESNEY, M.B., Ch.B., B.A.O., D.P.H., Cert. T.M. & H.
Sanitary Inspectors and Inspectors under Diseases of Animals Act	POOLE ...§P. W. WHEELER, Cert. R.S.I., M.S.I.A. BRANKSOME§C. A. TRIM, Cert. R.S.I., M.S.I.A. LONGFLEET§J. POWER, Cert. R.S.I., M.S.I.A. PARKSTONE§†A. E. HOLLOX, Cert. R.S.I. M.S.I.A.
Matron, Borough Isolation Hospitals	... Miss A. BROWN, S.R.N., R.F.N.
Health Visitors and School Nurses	...*Miss A. L. HOOPER, C.M.B., A.R.S.I. *†Miss L. B. LEVER, S.R.N., C.M.B., R.F.N. *†Miss F. E. MORGAN, S.R.N., C.M.B., R.F.N., Cert. R.S.I. appointed December 1933 *Miss C. C. MOUNT-BATTEN, S.R.N., C.M.B., H.V. *MRS. H. I. PARTRIDGE, C.M.B., Cert. R.S.I. *Miss B. A. SYDENHAM, Cert. Nurse.
Chief Clerk	...*F. B. EDWARDS.
Clerks	... Miss E. I. TAPPER. *Miss K. D. CODD. J. H. PLAYER. †D. V. PROTHERO.
Laboratory Assistant	... D. W. ROGERS.
Sanitary Inspectors' Assistants	... J. BLUNDEN V. B. JENKINS A. R. TARRANT †W. E. C. WELLMAN

## CONSULTANT AND PART-TIME SPECIALISTS.

Obstetrical Consultant	...†S. GORDON LUKER, M.A., M.D., B.Ch. (Cantab.), M.R.C.P. (Lond.), F.R.C.S. (Ed.)
Ophthalmic Surgeon	... ALEX STABLES, M.B., C.M.
Nose and Throat Surgeon	... C. SALKELD, B.A. (Lond.), M.B., B.S. (Durham).
Radiologist	... D. D. MALPAS, M.R.C.S., L.R.C.P.
Anaesthetist	... J. C. A. NORMAN, M.R.C.S., L.R.C.P.
Dental Surgeons	... L. B. MYERS, L.D.S., M.B.E. R. G. S. HOLMES, L.D.S.
Public Analysts	... C. G. MOOR, M.A., F.I.C. W. PARTRIDGE, F.I.C. (died, December, 1933).
Veterinary Surgeon	... J. S. WOOD, M.R.C.V.S.

NOTE : † Increases to staff during the past five years.  
• Contributions to Salary by Exchequer.  
§ Contributions to Salary by County Council.



"Better to hunt in fields for health unbought  
Than fee the doctor for a nauseous draught.  
The wise for cure on exercise depend;  
God never made His work for man to mend."

—Dryden.

## PREFACE.

To the Mayor, Aldermen and Councillors of the Borough of Poole.  
I have the honour to present my thirteenth Annual Report on the Health of the Borough.

There are no illustrations in this Report. If this be accepted as a suggestion for more ambitious Reports, I am content to leave it at that. Photography and other pictorial processes make for permanent record in these days more easily than would have been possible in the time of the Norman Conquest. But one is apt to wonder what we would have found had it been possible to see before us an illustrated edition of the Domesday Book—the produce of the fields, the farmer's gear, the trees, the towns, the roads, the homes, the clothing, the physical types of man, woman and child, their domestic animals, and so forth. It is probably true that the last 100 years have seen more change in the general conditions of the life of the community and of its environment than did the previous 800. Change is the order of the day, and as much in matters of Public Health as in other directions. Were it not so, an Annual Report of this kind would probably be considered superfluous.

A Public Health Department may gather some altruistic solace from the fact that the more effective are its preventive measures, the less does its work come under the public notice. However that may be, the pages following record that, in 1933,

the Borough has taken under its Public Health guardianship an area as large as itself.

The population continues to increase as much as, if not more than, any large town in England.

Building and modern sanitation are proceeding apace with the growth.

Town and country planning are in active being.

A five-year re-housing scheme has taken practical shape.

Efforts are being concentrated on making our shores both the sea- and the sun-bathers' delight.

The trade of the Port is steadily increasing.

A pure and ample water supply is being made still further available.

The toll of Tuberculosis is steadily decreasing.

Notifiable infectious illness has fallen.

The marriage rate has increased.

The infant death rate has fallen.

The total death rate has fallen.

*Endeavours to prevent maternal loss and ill-health are being extended in the direction of organised antenatal care and advice.*

*Preparations for more modern hospital provision are advancing. School attendance has reached a new high record.*

*Accommodation for the school population is being remodelled. Educational propaganda in Public Health is being maintained, from Clinics to Works and Factories.*

*Scientific steps to ward off the dreaded attack of Diphtheria continue unremittingly, with the eager co-operation of thinking parents.*

*A satisfactory credit balance in Health is being carried forward to 1934.*

*For their co-operation in these activities, I wish to thank all those whose names are mentioned in this Report, many others whose names do not appear, and not least the general public, who are just as much active and essential members of the Municipal "team."*

*I am,*

*Your obedient Servant,*

*R. J. MAULE HORNE.*

*Poole, April, 1934.*



# PART I.

## PUBLIC HEALTH

### GENERAL STATISTICS.

(1) *Area of Borough.* By the Dorsetshire Review Order 1933, which came into force on 1st April, 1933, the Canford Magna Civil Parish, with the exception of 179 acres, was absorbed in the Borough, thus raising the former land and inland water area of 7,964 acres to 15,640 acres, not including some 2,200 acres of tidal waters and foreshore.

This accession makes the Borough of Poole twelfth largest in size of the 118 County Boroughs and Greater Towns of England and Wales.

From the point of view of Local Government, it is much to be regretted that the Upton part of the parish of Lytchett Minster which was originally included in the scheme of extension, was ultimately excluded. Thus a rapidly developing area, contiguous to and closely associated with the Hamworthy end of the Borough is relegated to the fringe of the already unwieldy Rural District of Wareham and Purbeck.

(2) *Population:* (a) As at Census, 1/4/21 43,649  
 As at Census, 1/4/31 57,211

These figures show an intercensal increase of 31.1%, of which 24.9% was by "inward migration," otherwise new residents, and 6.2% by "natural increase," or the excess of births over deaths.

On 1st April, 1933, an additional area, which had a population at the date of the census of 1931, of 2,985 persons, was taken into the Borough. For these combined areas, the population

(b) as estimated by the Registrar  
 General at 30th June, 1933,  
 was 63,510

(c) as estimated at 31/12/33 was 64,000

*Density of Population per acre as at 1931.*

WARD.		ACRES	1921		1931	
			POP.N.	DNTY.	POP.N.	DNTY.
1	Hamworthy and Poole Quay	1106	3249	2.9	4779	4.3
2	Old Town West ... ..	68	3546	52.1	3140	46.2
3	Old Town East ... ..	123	3413	27.7	3230	26.3
4	Longfleet ... ..	343	4677	13.6	5037	14.7
5	Stanley Green, Oakdale ...	2053	5223	2.5	11919	5.8
	Newtown.					
6	Parkstone, Lower ... ..	1403	4651	3.3	6187	4.4
7	Parkstone, Higher ... ..	529	6967	13.2	8058	15.2
8	Branksome, North ... ..	698	6749	9.7	8339	11.9
9	Branksome, East ... ..	1641	5174	3.2	6522	4.0
		7964	43649		57211	
10	Canford ... ..	7676	2247		2985	

There will be noticed above a tendency for the Old Town to distribute its marked overplus of population to other wards.

A ward re-distribution is at present under consideration, which will materially affect these figures.

*Total Number of Inhabited Houses from Rate Books.*

As at December, 1932	...	...	...	15,019
As at December, 1933	...	...	...	16,225

This marked increase is partly due to the absorption of the parish of Canford Magna.

		1932	1933
(3) <i>Rateable Value :</i>	...	£461,327	£471,800
<i>Gross Value of 1d. Rate :</i>	...	£1,844	£1,908
<i>Rate Cost of Services :</i>			
Infectious Hospitals	...	2.0d.	1.6d.
Prevention of Disease	...	.3d.	.3d.
Salaries	...	.6d.	.6d.
Sewerage and Sewage Disposal	...	7.3d.	7.8d.
Collection and Disposal of Refuse	...	6.0d.	5.6d.
Public Baths	...	.4d.	.3d.
Parks and Open Spaces	...	4.1d.	5.4d.
Public Conveniences	...	.3d.	.3d.
Food and Drugs Acts	...	.0d.	.1d.
Building Inspection	...	.6d.	.5d.
Port Sanitary Service	...	.0d.	.2d.
Maternity and Child Welfare	...	.8d.	.9d.
School Medical Service	...	1.5d.	1.5d.

### PHYSICAL FEATURES.

The Borough of Poole occupies the extreme South-East corner of the County of Dorset, and is the largest Town in the County. The Town and the area within a radius of 10 miles contain nearly half of the total population of the County of approximately 240,000.

The plateau of Parkstone and Branksome behind the older parishes of Poole, Longfleet and Hamworthy, rises sharply at Constitution Hill and Newtown in the West, and continues East to Canford Cliffs, Branksome Park, and the Eastern boundary of the Borough, which is also the County Boundary between Dorset and Hampshire.

To the Northward of the plateau, the ground slopes gradually to river level at the Stour. In this latter watershed, however, is found the highest portion of the Borough, viz., Broadstone, and the Eastern end of the Corfe Hills.

As to geological formation, the parish of St. James is situated in alluvium; that of Hamworthy on valley gravel, Bagshot beds and plateau gravel. Sandbanks is of blown sand. In Parkstone and Branksome the geological stratum is mainly the Bagshot beds of sand, brick-earth, pipe-clay, and lignite, with many

pockets of plateau gravel. The Reading beds, lying below the above-mentioned strata, separate them from the chalk, which, although it comes to the surface to North-west of the town, at Coombe Alner, does not outcrop within the Borough.

The extensive enclosed waters of the Harbour, sheltered themselves by the Purbeck Hills, exert a controlling influence on the temperature, rendering the surrounding areas cool in summer and tempering the cold in winter. Hence the Town escapes many of the damp sea mists to which the coast line is subject.

The dependability of its general climatic conditions is now being more fully recognised, and the Town is rapidly increasing in popularity as an all-the-year-round Health Resort, especially by people who have spent many years in tropical or sub-tropical countries.

An abundance of pine woods serves to maintain and to enhance the value of an equable climate, and to give the district a high claim as a recuperative centre for those liable to Bronchitis and Asthma.

The quite exceptional rate of development which has been a marked feature of the last ten years also unfortunately brings with it the threat of diminution of the pine-clad areas. It should therefore be the desire and the practice of every owner of ground in the Borough—and the Corporation itself is a land-owner—to see that no tree be sacrificed where this can reasonably be avoided, knowing that the Town will be for ever the poorer. The Hills and the Harbour may be said to defy time; but if Poole will maintain its pride, it must preserve its pines.

It is interesting to record that only about thirty years ago the first blades of rice grass (*Spartina Townsendii*), which now covers some square miles of the Harbour, were found there. As a natural shore-binder this grass is of considerable value, and is being elsewhere used as an assistant in reclaiming low-lying foreshore land. A cliff-binder also has been brought to the assistance of work against coast-erosion, in the form of the "kaffir-fig" or *Mesembryanthemum*, which grows rapidly, into a matted defence against the attrition of the wind.

The River Stour, mentioned above, for over five miles of its winding course eastward, forms the northern boundary of the Town. In this course, it collects minor watercourses, chief of which is a tributary stream rising at Dunyeats Hill, flowing through the village of Cantford Magna, and entering the Stour in the direction of Hampreston.

A small stream—the Bourne—rises in the "Bourne Valley" part of the Borough, and flows out to sea, through the ornamental gardens of Bournemouth. It is not polluted by sewerage, although in part of its course it is not far removed from dwelling-houses. It is in process of being culverted in part, and where left open its banks



and proximity are receiving full artistic consideration under the Town Planning Scheme.

Another stream runs down through the Branksome Chine, arising from a spring in the centre of Branksome Park. This has now been transformed throughout its course into a fascinating park belt.

### METEOROLOGY.

The Borough Climatological Station commenced official operations and records in August, 1933, and these are published in the weather reports on Health Resorts in the daily papers.

There were 1,950 hours of sunshine at Poole in 1933, the Eastern half of the south coast of England having a higher record for the year than the western half.

For many years the value of a Health Resort has been largely gauged by its daily sunshine, as recorded by the sun's direct light on sensitized paper. Modern investigation, however, is upsetting old theories, and now a much more valuable estimate of the health-giving value of the sky over an area is obtained by recording the actual strength of the "ultra violet" rays of the vault, as they reach the earth's surface. It is in short, this "irradiation" of the earth which makes life possible, which gives the land its "green-coat," and which determines Nature's normal standards.

If we obstruct these ultra-violet rays in their passage towards the living body, the body suffers either by rickets, anaemia, or some other fault of "deficiency." Therefore, the less we allow these rays to be obstructed or filtered away by our surroundings, such as metal, wood, smoke, dust, glass, clouds, and other ray-dense substances, the more will we benefit physically.

Records of this ascertainment of the ultra-violet ray value of the sky's vault for the year show a daily average of 2.36 units, the figures for Torquay, Ventnor and Hastings being 3.40, 2.27 and 1.67 units respectively.

For the whole year, the daily average maximum temperature was 58.9°, and the minimum 43.2°.

The rainfall was 22.49 inches, well below the average for Poole of about 30 inches, while this latter figure is also well below the annual average for England as a whole. June was the driest month of the year, and August the warmest.

### LOCAL CONDITIONS, OCCUPATIONS AND INDUSTRIES.

There is no definitely industrial "Zone" in the Town, except inasmuch as trade seeks sea-borne or rail-borne facilities. The Pottery, Brick, and Tile industries locate themselves where the appropriate natural material offers itself. A portion of the Borough still retains a semi-rural character, but building developments are rapidly changing the aspect.

Industrial employment is found chiefly in the Pottery, Brick, Earthenware and Tile manufacture, the engineering trades, build-

ing and associated trades, timber yards, fishing and dock labouring, Gas Works, etc. At the Branksome end of the Borough a considerable element of the residents find employment in the neighbouring County Borough of Bournemouth. Canford Magna is partly agricultural with dairy farming, and market gardening.

Unskilled labour—quayside and general — forms a larger percentage than is desirable. A low wage-earning capacity militates against an improved social standard—with consequent hardships in health and in disease.

### UNEMPLOYMENT AND RELIEF.

Inasmuch as Poole is to some extent an industrial Town, as well as having the features of a Coast Resort, fluctuations in employment are of two kinds, the one periodic, dependent upon general industrial conditions, and the other seasonal, as is found in most Seaside and Health resorts.

For recent years the condition of the labour market is shown below.

Year.	Average of Unemployment	Unemployment as at December	Relief as at December
Annual Average 1926-1930	645	939	1345
1931	1355	1723	1334
1932	1920	2050	1434
1933	1693	1783	1708

### PUBLIC PARKS AND PLEASURE GROUNDS.

Apart from the extensive and picturesque sands and sea-front the Borough is well supplied with open spaces, which act as "lungs" for the use of the general public. These are

Poole Park (including extension)	48 acres
Branksome Dene ... ..	12 $\frac{1}{2}$ "
Ladies' Walking Field ... ..	9 "
Wimborne Road ... ..	13 "
Green Park, Longfleet ... ..	1 "
Constitution Hill ... ..	7 "
Parkstone Park ... ..	3 "
Jubilee Road ... ..	$\frac{3}{4}$ "
Alexandra Park ... ..	7 "
Overlinks Gardens ... ..	2 "
Evening Hill, Lilliput ... ..	3 $\frac{1}{2}$ "
Canford Cliffs ... ..	12 "
Sandbanks ... ..	12 "

Hamworthy Park ... ..	18	acres
Hamworthy Recreation Ground ...	16 $\frac{1}{2}$	"
Coy Pond Gardens ... ..	6 $\frac{3}{4}$	"
Bourne Vale Recreation Ground	22	"
Marline Road ... ..	2 $\frac{1}{2}$	"
Branksome Chine Gardens ...	22	"
Branksome Chine ... ..	25	"
Widdicombe Recreation Ground	2	"
Broadstone Recreation Ground ...	12	"
	<hr/>	
	257 $\frac{1}{2}$	"

These are provided with organised recreational facilities as follows :—

*Football Pitches.*

Hamworthy Recreation Ground ...	3	
Ladies' Walking Field ...	3	
Wimborne Road ... ..	1	
Broadstone ... ..	1	
Branksome Recreation Ground ...	2	
	—	10

*Hockey Pitches.*

Poole Park ... ..	3	
Wimborne Road ... ..	1	
Branksome Recreation Ground ...	1	
	—	5

*Rugby Pitch.*

Hamworthy Recreation Ground ...	1	1
	—	

*Net Ball Pitches.*

Poole Park ... ..	1	
Wimborne Road ... ..	1	
	—	2

*Cricket Pitches.*

Poole Park ... ..	2	
Wimborne Road ... ..	1	
Grammar School ... ..	1	
Hamworthy Recreation Ground ...	1	
Branksome Recreation Ground ...	2	
Broadstone Recreation Ground ...	1	
	—	8

*Tennis Courts.*

Poole Park ... 3 grass	2	hard
Canford Cliffs ... 2 "		
Branksome Park ... 2 "	3	"
Broadstone ... 1 "		
Cliff Cafe ...	1	"
	<hr/>	
		14



*Bowling Greens.*

Poole Park	...	...	2
Alexandra Park	...	...	1
Branksome Park	...	...	1

— 4

*Children's Gymnasia.*

Ladies' Walking Field ...Swings and See-saws.

Alexandra Park ... do.

Hamworthy Recreation Ground ... do.

Broadstone ... do.

Branksome Recreation Ground ... do.

*Putting Greens.*

Poole Park ... 1 nine-hole.

Sandbanks ... 1 nine-hole.

**VITAL STATISTICS**

Quinquennial figures under several headings from 1885 onwards are given in Table A.

For the last five-yearly period details are enumerated for comparison below :—

Year	Infantile Mortality per 1,000 births.	Per 1,000 of Population.				
		Birth Rate.	Marriage Rate.	Crude Death Rate.	Cancer Death Rate.	Pulmonary Tuberculosis Death Rate.
1927	58.1	17.5	16.0	12.30	1.45	0.71
1928	50.2	17.3	15.1	11.92	1.42	0.61
1929	46.3	16.8	16.8	13.16	1.50	0.56
1930	57.6	16.7	15.4	12.39	1.87	0.87
1931	43.2	15.8	16.5	12.50	1.81	0.84
1932	55.2	15.8	15.1	11.70	1.58	0.65
Average for Poole...	50.5	16.5	15.8	12.33	1.64	0.71
1933						
Poole ...	46.4	16.0	15.7	11.71	1.50	0.61
England & Wales ...	64.0	14.4	15.7	12.3		

For 1933 in detail, the particulars are set out below :—

		Total	Male	Female	
<i>Live Births</i>	Legitimate	929	460	469	Birth Rate : 16.0
	Illegitimate	41	21	20	
<i>Still Births</i>	Legitimate	47	28	19	Rate per 1,000 total births : 47.1
	Illegitimate	1	—	1	

			Total	Male	Female	
Deaths	...	...	744	367	377	Death Rate :
						General 11.71
						Corrected 9.89

*Percentage of Total Deaths occurring in Public*

*Institutions* ... .. 15.3 per cent.

*Maternal Deaths.* Number of women dying in or in consequence of childbirth:—

(a) from Sepsis 0

(b) from other causes 1

*Infantile Deaths*, or deaths under 1 year, per 1,000 live births :

(a) Legitimate : 42 Rate : 45.2 Combined

(b) Illegitimate : 3 Rate : 73.2 rate : 46.4

*Neo-Natal Deaths*, or deaths under 4 weeks,

per 1,000 live births ... .. 32.0

*Deaths from Measles* (all ages) : ... 2

*Deaths from Whooping Cough* (all ages) : ... 1

*Deaths from Diarrhoea* (under 2) ... 2

The following statistics are based on the Registrar-General's estimate of the population at mid-year 1933 of 63,510 inhabitants.

*The Birth Rate* was 16.0 per 1,000 of the population and is steadily falling. For the country as a whole the rate was 14.4.

*The Infantile Death Rate.* This is discussed in detail in the section of the Report dealing with Maternity and Child Welfare. The rate of deaths per 1,000 live births in 1932 was 55.2. In 1933 it has fallen to 46.4. For England and Wales as a whole, the 1933 infantile death rate was, in the great towns, 67, in the smaller towns 56, and 64 for the whole country.

Stillbirths totalled 48, 47 being legitimate. This gives a figure of 47 stillbirths per 1,000 total births, which is higher than the figure for the whole country, viz., 41.

*The Marriage Rate.* For 1933 this was 16.1 per 1,000 of the population, as compared with 15.1 in 1932. For England and Wales in 1933, 15.7.

*The Death Rate.* The general death rate for the year was 11.71 as compared with 11.73 for 1932. For the whole country the death rate was 12.3, which is .3 above the rate of 1932.

Speaking generally, in an essentially residential district like Poole, the influx of population tends to be elderly; to a busy manufacturing centre, a younger adult life is attracted. This factor helps to keep the death rate high in the former case.

In an industrial town, the proportion of population which reaches the age of 65 years is about 33 per cent. of the whole. In Poole, of all deaths during recent years, over 50 per cent. have exceeded that age, and in 1933, 15.7 per cent.

In estimating what is described as the Corrected Death Rate for Poole, the Registrar General makes an allowance for any

abnormal "age distribution" of the population, and also for the "sex distribution," which shows the death rate in a more favourable light, when these two modifying factors are taken into account.

The resulting death rate is actually 9.89 per 1,000 of the population. This method of gauging the relative healthiness of a district is more accurate than by reference to the General Death Rate.

*The Cancer Death Rate.* The total deaths from malignant disease in 1933 were 95, which gives a death rate of 1.50 per 1,000 inhabitants. In 1932, the figure was 1.58. For England and Wales in 1933, the figure is not yet available.

*Deaths from Pulmonary Tuberculosis* numbered 39. The resulting rate is .61 per 1,000 of the population.

### WATER SUPPLIES.

The main water supply for the district is provided by the Corporation Waterworks at Corfe Mullen, about 6 miles N.W. of the Town. A section of the population, occupying 2,480 houses at the East end of the Borough, and 115 houses at Canford Magna is supplied from the reservoirs of the Bournemouth Gas and Water Company.

Prior to the year 1910, the Town obtained its supplies from reservoirs in the Waterloo, Lilliput, Alderney and Springfield districts of the Borough. In 1906 the Corporation decided to purchase these works, which were the property of the Poole Waterworks Company.

In 1910, the old supply was entirely replaced by the purer water from the Corfe Hills. In 1919, a mechanical chlorinating plant was installed, and a scheme of improvement and extension was commenced at a cost of £82,000, to meet the needs of the rapidly growing population of the Borough, of Broadstone, Corfe Mullen and Lytchett, and of other outlying districts within the limits of supply.

2½ miles of new distributing mains have been laid during the year, and over 1 mile of 16 inch pumping main.

The water maintains an excellent and consistent standard of bacterial purity. The only defect is that, like all other chalk waters, it is rather hard.

A chemical analysis of the water from the two supplies, just made shows :—

## Chemical Results in parts per 100,000.

Company Supply.			Corporation Supply.		
Turbidity	...	Clear and Bright.	Appearance	...	Clear and Bright.
Colour	...	Normal.	Colour	...	Normal
Reaction pH	...	Neutral 7.8	Reaction pH	...	Neutral 7.5
Electric Conductivity at 20 ° C.	...	405	Electric Conductivity at 20 ° C.	...	490
Total Solids, 180 ° C.	...	27.0	Total Solids, 180 ° C.	...	32.5
Chlorine in Chlorides	...	1.9	Chlorine in Chlorides	...	2.2
Nitrogen in Nitrates	...	0.26	Nitrogen in Nitrates	...	0.14
Hardness: Permanent	...	4.0	Hardness: Permanent	...	3.5
Temporary	...	14.0	Temporary	...	20.0
Total	...	18.0	Total	...	23.5
Metals	...	Absent.	Metals	...	Absent
Free Ammonia	...	0.0028	Free Ammonia	...	0.0016
Albuminoid Ammonia	...	0.0040	Albuminoid Ammonia	...	0.0004
Oxygen absorbed in 3 hours at 37 ° C.	...	0.0650	Oxygen absorbed in 4 hours at 80 ° F.	...	0.0150
Bacteriological Results.			Bacteriological Results.		
No. of Bacteria per c.c.			No. of Bacteria per c.c.		
On Gelatine in 3 days at 20 ° C.	...	3	On Gelatine in 3 days at 20 ° C.	...	10
On Agar in 24 hours at 37 ° C.	...	3	On Agar in 1 day at 37 ° C.	...	3
The Bacillus Coli	...	Present in —.	The Bacillus Coli	...	Present in —.
Bacillus Welchii	...	Present in —.	Bacillus Welchii	...	Absent in 100 c.c.
(B. Enteritidis Sporogenes)	...	Absent in 100 c.c.	(B. Enteritidis Sporogenes)	...	Absent in 100 c.c.

The remarks of the Analyst—Dr. J. F. Beale—on the Corporation supply are :—This is a clear and bright, colourless and odourless water of neutral reaction. It is hard in character, the hardness being largely of a temporary nature, and contains no excess of saline matter.

The water is free from metals and of a high standard of organic and bacterial purity.

We regard the water as pure and wholesome suitable for drinking and domestic purposes.

(Signed) E. V. SUCKLING, For Drs. Beale and Suckling.



The consumption of water supplied by the Borough Scheme in 1933 was 609,146,000 gallons, representing an increase of about 54,190,000 gallons on that of 1932. This includes the outlying districts referred to.

The system of purification by chlorination provides the Town with water of a high standard of bacterial purity, samples of well and tap water being periodically submitted to examination in the Borough Public Health Laboratories.

The geological strata from which the wells draw the water cause this to be of "hard" quality. It fluctuates about the maximum point of hardness which is considered tolerable as a standard for general use.

The total storage capacity is 6,670,000 gallons, with a pumping capacity of 96,000 gallons per hour.

The alterations in the Corfe Mullen Pumping Station referred to in this Report for 1932 have now been completed. The triple expansion steam engine, well pumps, and high-lift pumps capable of delivering 3,000,000 gallons of water per day have been completed, and were in commission during the drought period.

A constant and abundant supply of water has been maintained throughout the year.

### DRAINAGE AND SEWERAGE.

The duties of collection, removal and disposal of night soil from unsewered areas were transferred during the year to the Committee responsible for the provision of sewers, viz., the Roads and Works Committee.

At the end of 1932 there were 456 cesspools being dealt with by the cesspool plant, 33 of those being in sewered roads, but not yet connected to the system.

During 1933, Rossmore and Upper Churchill Roads were sewered, and roads shown in *italics* in the table below are authorised to be sewered, in whole or in part, in 1934.

DISTRICT.			No. of Cesspools on Books	Sewer available but Cesspools not connected
Alder Road	...	...	7	—
Alderney Estate	Herbert Avenue	...	15	—
	Manor Avenue	...	8	—
	Evering Avenue	...	1	—
	Berkeley Avenue	...	3	—
	...	...	—	4
Cornelia Crescent	...	...	—	4
Foxholes :	Foxholes Road	...	7	—
	<i>Hunt Road</i>	...	23	—
	Cornwell Road	...	9	—
	Dale Road	...	6	—
Carried forward			79	4

DISTRICT.				No. of cesspools on books	Sewer available but cesspools not connected
Brought forward				79	4
Good Road	...	...	...	1	—
Hamworthy :	Hamworthy Park	...	...	1	—
	Blandford Road	...	...	27	—
	Lake Road	...	...	8	—
	Lulworth Avenue	...	...	23	—
	Dawkins Road	...	...	3	—
	Branksea Avenue	...	...	11	—
	Carter's Avenue	...	...	4	—
	Galloway Road	...	...	4	—
	Hoyal Road	...	...	—	1
	Balston Road	...	...	2	—
	Station Road	...	...	1	—
	The Crescent	...	...	5	—
	Various	...	...	9	—
Ringwood Road	...	...	...	60	—
	Bond Road	...	...	4	—
	Bridle Path	...	...	3	—
	Dunstan Lane	...	...	5	—
	Old Wareham Road	...	...	29	—
	Cuckoo Road	...	...	3	—
	Fancy Road	...	...	9	—
Rossmore :	<i>Fortescue Road</i>	...	...	2	—
	Harford Road	...	...	4	—
	Rossmore Road	...	...	—	13
	Stanfield Road	...	...	8	—
	Upper Road	...	...	1	—
	Branksome Cemetery Lodge	...	...	1	—
<i>St. Clement's Road</i>	...	...	...	19	—
Stanley Green :	Dorchester Road	...	...	—	1
	Stanley Green Road	...	...	2	—
	<i>Palmer Road</i>	...	...	38	—
	Oakdale	...	...	4	—
Upper Churchill Road	...	...	...	—	5
Wallisdown	...	...	...	71	—
Whitecliff Road	...	...	...	—	1
Wimborne Road	...	...	...	14	—
Various :	Baiter Baths	...	...	1	—
	Baiter Hospital	...	...	1	—
	Chaddesley Wood	...	...	3	—
	Poole Park Tea Rooms	...	...	1	—
	Mill Lane	...	...	1	—
	Western Road	...	...	1	—
	Parkstone Congregational Church	...	...	1	—
	Sterte Road	...	...	1	—
	Wolseley Road	...	...	1	—
Total	...	...	...	466	25



From this table, it will be seen that the year ended with 491 cesspools on the books, an increase of 36, resulting from the addition of 65 new cesspools, and the connecting up of 29 to the sewers.

A new question has, however, introduced itself by the absorption of the extensive area of Canford Parish. Approximately 420 cesspools were being dealt with in this area when taken over. Proposals which have been provisionally approved of by the Borough Council and the County Council, subject to certain conditions, to cope with this position, are summarised below. Of these, the first named will probably receive earliest attention, there being an efficient sewage works already operating in the vicinity.

(1) *Creekmoor.*

For the drainage of two small estates now being developed off Creekmoor Lane near Messrs. Sykes brickworks and on which 53 houses have already been erected. The proposed sewers will eventually deal with about 200 houses, of which 68 are existing.

It is proposed to pump the whole of the sewage to the existing Broadstone Works.

(2) *Bear Wood.*

For the drainage of 48 existing houses now erected between Knighton Lane and the Borough boundary. The proposed sewers will eventually deal with approximately 200 houses. It is proposed to deal with this sewage at new works to be constructed on a suitable site between Bear Wood and the river Stour.

(3) *Willet Arms.*

For dealing with the drainage from estates now being laid out in the vicinity of Merley Bridge and Willet Arms together with that from development along existing roads in the immediate neighbourhood. 63 houses are already erected, and the proposed sewers will eventually deal with about 350.

It is proposed to construct new works on a suitable site between Willet Arms and the river Stour.

(4) *Waterloo.*

For dealing with the area between Planefield Farm off the Blandford Road, Broadstone, and the junction of Stanley Green Road and Wimborne Road, Poole. 90 houses are existing at present in this area, and it is considered at least 500 houses will eventually be dealt with.

The sewage will either be pumped to be dealt with at the Broadstone Works or pumped to the sewer head at the junction of Stanley Green Road and Wimborne Road where it will gravitate to the Sterte Ejectors.

### CLEANSING AND SCAVENGING.

The main services are carried out by the Borough Surveyor's Department, acting under the direction of the Public Health Committee.

I am indebted to the Borough Surveyor for the following summarised figures applicable to the year ending 31st March, 1933.

		Collection.			Disposal.			
<i>House Refuse.</i>								
Net Cost	...	...	£7091	0	0	£1270	0	0
Net cost per ton	...	...		11	5½		2	0¾
Net cost per 1,000 population	...	...	121	15	6	21	16	2
Net cost per 1,000 houses	...	...	437	6	2½	78	6	5
Weight (cwts.) per 1,000 population								
per day	...	...	11.62					

*Street Cleaning and Gully Cleansing.*

Total mileage of streets cleansed	...	...	86.9
Square yards of streets cleansed (number of square yards × number of times cleansed)	...	...	131,963,028
Net cost per 10,000 yds. cleansed	...	...	9/7¾
Net cost per 1,000 population	...	...	£109 8 6

Total Number of gullies cleansed (number of gullies × number of times emptied)	...	...	21,000
Net cost per 1,000 gullies cleansed	...	...	£28 12 1
Net cost per 1,000 population	...	...	£10 6 4

The collection of trade refuse is governed by the following charges :—

**FISHMONGERS AND BUTCHERS.**

(a) Ordinary Collection	charge	15/- per annum
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**OTHER TRADES.**

(b) Ordinary collection	charge	7/6	..
(c) ¼ cart load per week	..	£2 10s.	..
(d) ½ " " "	..	£5	..
(e) 1 " " "	..	£10	..

Limewashing is of valuable assistance in maintaining the cleanliness of courts, enclosed backyards and alleys. It is not only of value in itself, but has a stimulating effect on the surrounding householders, who respond extremely well. The result is that the general condition of these places is distinctly complimentary to the people and to the Town. The work is carried out by the Public Health Department twice yearly.

Opportunity is also taken during the School vacations to disinfect all the Elementary Schools of the Borough.

**POPULATION AND HOUSING.**

In 1921, 10,350 private families occupied 9,044 "structurally separate" occupied dwellings, and 356 were empty. By the Census 1931, 15,036 private families occupied 13,529 dwellings, and there were 644 empty.

The reduction in density of "persons per occupied room" was from .78 to .72.

Taking "over 2 persons per room" as a standard for comparison of urban overcrowding, 1,564 of the total population in 1921, or 3.72 per cent. were so housed. In 1931, 1,489 people, or 2.73 per cent. of the community, were in a similar position. Analogous figures for some of the great industrial centres of England in 1931 are given for comparison:—

Birmingham	...	...	...	7.08 per cent.
Leeds	...	...	...	8.21 " "
Liverpool	...	...	...	10.94 " "
Manchester	...	...	...	6.72 " "
Sheffield	...	...	...	8.24 " "

In Dorset itself, local figures at 1931 were Bridport, 2.61 per cent. ; Dorchester, 2.09 per cent. ; Portland, 3.80 per cent. ; Weymouth, 2.01 per cent.

With the operation of the Housing Act, 1930, by the method of Clearance and Improvement Areas, the effect on these percentages of the local "five-year schemes" will be awaited with lively interest. In Poole, the scheme proposed covers three Clearance Areas with 66 houses, one Improvement Area of 234 houses (162 for demolition), and 57 individual unfit houses for demolition.

In the Parish of Canford Magna, taken over on 1st April, 1933, there were, according to Census, 1931, 830 private families (2,985 persons) in 796 separate dwellings, 33 houses being unoccupied.

According to the last Census, there are 3.63 persons per family in the Borough, and it is assumed that each family should live in a "structurally separate dwelling." As there are now 64,000 inhabitants in the town, this would imply 17,383 such dwellings.

At 1st October, 1933, there were 16,667 houses on the Rate Books. By the end of the year, a further 191 houses were completed and 340 more were under construction, giving a total of 17,198.

Against this, 285 "decrepit" houses are scheduled to come down in the five years re-housing scheme mentioned above. So that, at the end of the year, the position was, approximately, a shortage of 470 houses, if every family were to be "self-contained" in this way.

Of the total of 16,667 dwellings referred to above, 12,340 were of £22 rateable value or less, and of these, 249 were empty. It would be interesting to extract the reasons for such a large number of relatively lowly-rated houses not being occupied. Possibly the next re-assessment may show that some of these houses have been too leniently assessed, and that the rentals left them beyond the average artisan's pocket.

### HOUSES LET-IN-LODGINGS.

*Housing Let-in-Lodgings.* Prior to the current high rate of room-rentals, which has rendered the Byelaws with respect to these houses inoperative, there were 8 on the Register.



*Common Lodging Houses* number three, two in St. James area and one in Branksome. These can accommodate 76 men and are situate :—

24 West Street, Poole	35 beds.
3 Strand Street, Poole	25 beds.
23 Alcester Road, Parkstone	16 beds.

They were visited 79 times.

Poole, as a seaport town, feels the need of a controlled Model Lodging House. It would cater for the visiting seamen, who would be saved from possibly risky associations. It would also provide healthy rest for a certain nomadic element of unskilled labour.

### **PUBLIC BATH, BATHING AND SWIMMING FACILITIES.**

*Sea Water.* The exceptional facilities for natural sea-bathing provided at Sandbanks are enhanced by one of the finest Bathing Pavilions in the country.

The sea water swimming enclosure adjacent to the Poole Park affords another useful public recreational centre, and is a valuable addition to the attractive open-air undertakings of the Town.

There is also a free open-air tidal swimming enclosure on the foreshore of the Harbour at Baiter, of which full advantage is taken in the summer months.

*Fresh Water Baths.* These are situated in rather limited space, close to the Guildhall, and consist of five cubicles with lavatory accommodation. Special facilities are provided for Elementary School children, on two days weekly, at a nominal charge of one penny.

The following figures of attendances at the baths for recent years indicate, with the exception of 1930 and 1933, a decreasing use, which may, though probably not appreciably, be influenced by the number of houses with bathroom accommodation which have been built during the same period :—

Year.	Adults.	Children.	Total.
1924	5357	1680	7937
1925	5950	1230	7180
1926	4812	1020	5832
1927	4496	1330	5826
1928	4178	1092	5270
1929	3638	1002	4640
1930	3668	1192	4860
1931	2757	1181	3938
1932	2580	765	3335
1933	2996	1266	4262

### BATHING AND THE BAY.

A continuous bacteriological survey of the shore waters of the Bay, covering a period of fifteen months, was summarised and submitted to the Ministry of Health during the year.

The Report on this survey is most encouraging, and on the recommendation of the Ministry, a further prolonged series of tests will be made during 1934, in the hope that these will confirm the results already obtained.

Under the circumstances, a public statement would be premature, but it is confidently hoped that the Bay will be found completely to vindicate itself as an unimpeachable stretch of water, for a recognised Health Resort.

### RAT CONTROL.

Poole being a Port, both the rarer Black Rat and the commoner open-air Brown Rat are liable to be found in the Borough. The obligation to deal effectively with rats falls under the Rats and Mice (Destruction) Order, 1919, upon the owner or occupier of premises infested with them. To assist in the clearing of premises harbouring these rodents, a charge of 3/6 being made, 152 visits were made for private occupiers in 1933. It is the custom to re-visit the premises and grounds the day after baits are laid, to collect unused baits, and every precaution is taken to prevent domestic animals from gaining access to the material used. A leaflet of advice and warning is also delivered at each place dealt with.

The experience gained in dealing with quayside grain stores, etc., agrees with the recommendation of the Ministry of Agriculture and Fisheries, namely, that to get good results, the rat must be treated to an attractive change of diet from that to which it gets ready access.

Wherever poultry food, eggs and young chickens are kept, rats are likely to be attracted. This, combined with the fact that many of the more secluded wooded areas of the Borough are now being cleared for habitation, calls for an appeal to those who keep hen-runs to consider their neighbours who do not. New poultryhouses and chicken-coops should be made rat-proof as far as possible, and the food should be stored in rat-proof receptacles.

Any figures dealing with rat control are bound to be hypothetical, as the actual dead rats openly discovered are not accurate indication of the number that have fallen to the bait. From the following results obtained, however, during the past few years, it may safely be assumed that the rat population is being more than held in check.

8,169 baits were laid on 304 visits to private premises or public places, with a catch of 190 rats, compared with 139 in 1932.

With some 600 new houses arising each year, a certain amount of new ground, some of it timbered woodland, is being continually opened up, with the result that some rats are kept on the move, and occasionally complaints are heard of in unexpected areas.

In the Autumn a professional rat-catcher was employed on a campaign against rats on the Whitecliff Reclamation Ground, the aviary in Poole Park, Sandbanks and Branksome Dene.

### **MOSQUITOES, WASPS, ETC.**

The system of spraying the fresh water lakes, ponds and watercourses with paraffin for the destruction of mosquitoes and their larvae was continued within the Borough during the past year.

Between April and September, the hottest period of the year, periodical visits were made to infested places requiring attention.

244 gallons of paraffin (with 2% castor oil) were used.

This mixture has proved very effective also in the destruction of wasps' and ants' nests.

### **SMOKE ABATEMENT.**

In a Borough such as Poole, with its possibilities as a recuperative resort, each householder should recognise that his own personal effort in the matter is essential to progress. Excess of smoke distributed in the air of a town means liability to fog. Fog is commonly due to the particles of soot and other suspended matter collecting a coat of moisture and settling in a dense mass, irritable to a healthy chest, and seriously undermining the weak.

Smouldering, burning and consuming are all different in degree, with results also differing in degree, viz., bad, indifferent, and good. The slow smouldering of domestic refuse on the back of a fire has nothing to recommend it from this point of view; and the smouldering of damp garden refuse has less. Rapid firing in a good draught is essential if the slogan "Burn your refuse" is not to be a counsel of doubtful foresight.

During the year 121 observations were made, 28 instances of excessive smoke were found, and advice or caution effected a satisfactory improvement.

### **DISEASES OF ANIMALS, ETC.**

The number of persons who keep pigs is gradually lessening, as is to be expected from the increasing value of land for building purposes. During the year, 8 suspected cases of swine fever were investigated, but none were ultimately confirmed.



### FOOD.

In addition to the ordinary inspection of foodstuffs and meat, certain important Regulations lay down lines of action which the Inspectors of the Department follow in safeguarding the public in the matter of the maintenance of Dairies, Cowsheds and Milkshops, the Sale of Milk and Cream, the Sale of Food and Drugs, the control of Slaughterhouses, etc.

Considerable recent legislation, particularly in the direction of the supply of clean, wholesome milk and sound meat, entails redoubled exertions on the part of the Inspectors and of the Health Department, but the work is willingly done in the knowledge that the community will gain.

81 formal samples of Milk were taken for analysis.

4 of these were found to be adulterated. In all four instances, the vendor was cautioned.

Opportunity is taken in the Laboratory to examine for extraneous solid matter—otherwise “dirt”—the samples of milk submitted for report.

The 25 samples examined were classified as follows:—

EXTRANEOUS MATTER IN PARTS PER 100,000		
Clean Milk. (0—10)	Not a clean Milk. (10—20)	Dirty Milk. (over 20)
14	9	2

There are no underground Bakehouses in the Borough.

All butchers' shops comply with the Regulations requiring provision of suitable window-shutter facilities.

Table G enumerates the samples taken by the Inspectors under these Acts, and subjected to analysis as to genuineness or presence of preservative.

The report of the Borough Analysts on their work for the year is appended:

#### REPORT ON WORK AS PUBLIC ANALYST FOR 1933.

During the year 1933, 179 samples were submitted for analysis under the Food and Drugs (Adulteration) Act, 1928. This total was constituted as follows: Milk 75, Skimmed Milk 6, Cream 1, Butter 12, Margarine 7, Cheese 3, Lard 2, Dripping 2, Shredded Beef Suet 4, Flour 1, Flour, Self-raising 9, Cornflour, 1, Milk Pudding Mixture 1, Blancmange Powder 1, Custard Powder 1, Baking Powder 2, Egg Substitute Powder 1, Tea 6, Coffee 2, Coffee and Chicory 1, Cocoa 3, Sugar 2, Vinegar 4, Pepper 6, Ground Ginger 1, Dried Herbs 1, Dried Fruit 6, Sausages 1, Preserved Sausages 1, Ice Cream 14, Wine 1, and Rat Bait 1.

Of these samples, five (3 of milk, 1 of skimmed milk and 1 of ice cream) were returned as adulterated, so that the percentage of adulteration was 2.79.

Milk was adulterated to the extent of 4.0 per cent. as compared with 3.4 per cent. in 1932. Two of the samples were deficient in fat to the extent of 1 per cent. and 4 per cent. respectively while the third contained 6 per cent. of added water.

During the year the average composition of the samples of milk was 3.49 per cent. of fat and 8.87 per cent. of solids-not-fat; these show no improvement over the corresponding figures for last year.

The adulterated sample of skimmed milk contained 8 per cent. of added water.

In the case of one sample of ice cream returned as adulterated, 0.2 grain of zinc per pound was found to be present. Ice cream containing more than 0.1 grain of zinc per pound is objectionable as the presence of this metal in such an amount may cause sickness. Although the bulk may not have contained sufficient zinc to be harmful, the proportion present in this sample indicates that the ice cream was kept too long in a galvanised container. This point was discussed in the Report for 1928.

The cream supplied was of average dairy quality, containing 46.3 per cent. of fat.

It is regrettable that the slight improvement in the quality of butter as regards water content, referred to in the Report of 1932, has not been maintained this year. In fact, the amount of water incorporated in butter has not been so high for a period of over ten years. The average of 15.57 per cent. this year does not fall far short of the maximum amount (16 per cent.) legally permissible, and of all twelve samples no one could be called a well-made dairy butter for in no case was the amount of water present below 15 per cent. While such butter has perforce to be regarded as genuine in respect of the water content, manufacturers appear to be displaying considerable dexterity in keeping the percentage of water just below the maximum limit and thus supplying the consumer with a food of reduced nutritional value.

There was an improvement in the quality of margarine which contained on an average 14.31 per cent. of water as compared with 15.00 per cent. last year. In only two cases did the percentage of water exceed 15.0 while one sample contained as little as 12.9 per cent.

Of the three samples of cheese examined, two were genuine whole-milk cheeses containing 29.2 and 32.9 per cent. of moisture respectively. The third was a sample of Gorgonzola cheese containing 39.8 per cent. of moisture, a typical figure for moisture content. Acidity was low and no complaint as to taste would be anticipated in this respect.

The two samples of coffee contained respectively 4.5 and 4.7 per cent. of moisture so that absorption of moisture from the air during storage had not been excessive.

A complaint was received that a sample of Demerara Sugar appeared to contain particles of dirt which looked very like manure. The amount of debris in the sample was 0.022 per cent., but was found to consist of particles of sugar cane, a natural constituent of the article, which was however of a more crude nature than average table Demerara sugar. No particles of manure were found.

The sample of Dried Herbs was of poor quality since it contained 3.2 per cent. of sand present, not as small rounded granules, but as fair-sized particles which might prove disquieting to the digestive tract of some consumers. An observation was made to this effect, to which it was recommended the vendor's attention should be drawn.

The samples of Dried Fruit consisted of sultanas (2), raisins (3), and currants. All were free from sulphur dioxide except one sample of sultanas but the amount present fell below the maximum permitted by the Preservatives Regulations. Zinc also was absent from four of the samples and in the other two cases was negligible in amount.

An informal sample of Bordeaux wine was submitted for examination as it was alleged to have caused diarrhoea. A prolonged investigation was made but no noxious substances were found and it was suggested that the complaint was really a matter of idiosyncrasy.

The informal sample of rat bait consisted mainly of a starchy material with a very small quantity of arsenic, too small a proportion to kill rats. Such a bait could be used as one of a series and would be laid down in order that the rats should not be suspicious of other baits similar in every respect except that they would contain much greater amounts of arsenic.

ERNEST M. HAWKINS.

### MILK AND DAIRIES (AMENDMENT) ACT, 1922.

The number of Dealers in Milk operating in the Borough is as under :

Description.	As at 1932	Registered in 1933	Rmvd. from register	Total
Retail Purveyors ... ..	89	12	—	101
Purveyors of Bottled Milk only	59	12	—	71
Wholesalers and Producers ...	16	5	—	21
<i>Licences under Special Designations :—</i>				
To sell Certified Milk ... ..	2	—	—	2
Grade A (Tuberculin Tested) ...				
Milk ... ..	—	—	—	—
Grade A Milk ... ..	1	—	—	1
Pasteurised ... ..	2	—	—	2

### LIST OF ADOPTIVE ACTS, LOCAL ACTS, ETC.

#### *Adoptive Acts.*

- The Infectious Diseases (Prevention) Act, 1890.
- The Public Health Acts (Amendment) Act, 1890.
- The Public Libraries Acts, 1892 to 1901.
- The Baths and Wash-houses Acts, 1846 to 1899.
- The Private Street Works Act, 1892.
- The Notification of Births Act, 1907.
- The Public Health Acts (Amendment) Act, 1907 :
  - Part II. Sections 15-23, 25-27, 29-33.
  - Part III. Sections 34-50.
  - Parts IV-VI.
  - Part VII. Section 81.



Part VIII.      Part X.  
Public Health Act, 1925 :      Parts II-V.

*Local Acts.*

Poole (Extension) Order, 1905.

Confirmed by the Local Government Boards' Provisional Orders Confirmation (No. 12) Act, 1905.

The Poole Corporation Water Act, 1906.

The Poole Corporation Act, 1919.

The Poole Corporation Act, 1928.

*Bye-laws.*

<i>Date of Approval.</i>	<i>Subject.</i>
9th November, 1899.	Parks and Pleasure Grounds.
29th October, 1890.	Pleasure Boats and Vessels.
20th December, 1895.	Whirligigs and Swings.
20th December, 1895.	Sanitary Conveniences.
28th April, 1896.	Telegraph and Other Wires.
1st May, 1896.	Common Lodging Houses.
4th May, 1896.	Slaughterhouses.
24th December, 1896.	Nuisances.
27th February, 1901.	Pleasure Grounds.
11th July, 1902.	Poole & District Light Railway Order, 1899.
4th August, 1905.	Section 74 of Education Act, as amended.
7th December, 1905.	Pleasure Grounds.
11th January, 1907.	Cemeteries, Management of
13th November, 1907.	Good Rule and Government.
8th June, 1909.	Shop Hours Act, 1904 (Closing Order)
6th July, 1911.	Houses Let in Lodgings.
14th August, 1911.	Public Bathing.
1st November, 1911.	Water, Preventing Waste, etc.
19th November, 1914.	Locomotives.
21st January, 1915.	Street Trading.
5th June, 1917.	Sale of Coal.
24th January, 1922.	Employment of Children Act.
6th March, 1925.	Omnibuses.
18th May, 1925.	Nuisances.
6th July, 1925.	Employment of Children Act
14th April, 1926.	New Streets and Buildings.
24th January, 1927.	Pleasure Grounds.
16th August, 1927.	Hackney Carriages.
16th August, 1927.	Omnibuses.
7th October, 1927.	Slaughterhouses.

*Regulations.*

Cemeteries.

Dogs Order, 1906.

Dairies, Cowsheds and Milkshops, 1908.

Drains of Buildings with Sewers, Connection of,  
Nursing Homes.

Fire Brigade.

Parks, Persons Using.

Bowls, Game of

Tennis, Game of

Education Committee, Constitution of

Grammar School, Government of

School of Art, Government of

School Managers, Guidance of

Parking of Cars

**LOCAL GOVERNMENT SUPERANNUATION ACT, 1922.**

Medical examinations were carried out and reports made on fitness, in the case of 82 candidates for designated posts under the Corporation. Of these, 60 were passed without qualification. 18 were deferred, usually for one year, to be re-examined after advice as to action to be taken, and it was found necessary to reject 4.

**INFECTIOUS DISEASES.****Control of Infectious Diseases.**

The Borough Public Health Laboratory examines free of charge all pathological and bacteriological specimens submitted by medical practitioners, Health Visitors, School Nurses or Hospitals, the report being telephoned where urgency is of importance. Particulars of work done in this sphere will be found in the portion of the Report dealing with the Laboratory. As the Medical Officer of Health is also School Medical Officer, Medical Officer under the Maternity and Child Welfare Scheme, Port Medical Officer, Superintendent of the Fever Hospital, Director of the Laboratory, and Honorary Pathologist to the Cornelia Hospital, he is thus enabled to keep himself in intimate personal touch with illness, which it would be impossible to maintain in a town of larger population.

Absentee Reports from the School Staffs are checked and followed up by the School Nurses and School Attendance Officers; and systematic swabbing of sore throats and discharging nostrils, both at home and in the School Clinics, is a valuable aid to checking a school outbreak, as often an unsuspected case is thus disclosed and spread prevented.

Diphtheria cases, after two weeks at home on discharge from Hospital, and before returning to school or business, are requested to report to the Health Department, and two consecutive negative Laboratory reports are obtained before release from observation.

By this means the number of undetected persistent convalescent carriers is reduced to a minimum. The futility of reliance on the result of only one swabbing is clearly recognised.

During the year 711 swabs were taken by the Public Health staff in connection with diphtheria cases, carriers and suspects, and in "following up" convalescent cases after discharge from hospital.

Diphtheria antitoxin is available free to medical practitioners on application to the Public Health Office, on certificate of emergency.

The Health Visitors, by the operation of the Notification of Births Act, are able to track out such infantile conditions as Ophthalmia, Pemphigus and Erysipelas.

For the cleansing and disinfection, and disinfection of verminous persons and their belongings, Alderney Hospital is equipped with baths and steam disinfectant.

The disinfection of premises, after infectious illness, is carried out by the Department's employees under the supervision of the Sanitary Inspectors.

#### **Control of Diphtheria by Immunisation.**

As this is an aspect of Preventive Medicine proper, reference is made to it here. A fuller exposition, as it affects primarily the School Medical Service, will be found in that section of this Annual Report.

Propaganda is maintained by taking advantage of every opportunity of coming into contact with parents at School Medical inspections, Minor Ailment Clinics, Dental Clinics, Child Welfare Centres, Health Talks, etc.

The following slip is enclosed on all occasions for correspondence in any of the above connections :—

BOROUGH AND COUNTY OF TOWN OF POOLE.

#### **Diphtheria Prevention.**

**Diphtheria** is a dangerous infectious disease which mainly attacks children.

Each year in England and Wales between 2,500 and 3,000 children die of this disease.

There is available a safe and reliable means of preventing Diphtheria.

Protection is obtained by a course of two or three small injections at suitable intervals.

These injections are relatively painless and do not give rise to any injurious after-effects.

Many thousands of children have been protected in this and other countries, and the methods employed have been proved to be effective and harmless.

Facilities for protection are available at the School Minor Ailment Clinics.



You are strongly advised, in the interests of your children, to have them protected against Diphtheria. Once protected, it is believed they will remain so for life.

All you are asked to do is to send your request to the Public Health Department, Park Gates East, Poole.

**R. J. Maule Horne, M.B., D.P.H.,**  
*Medical Officer of Health.*

In addition to the activities at the official Immunisation Clinic the work is being taken up to a certain degree by local medical practitioners, who co-operate by submitting the names of those protected for record.

If the general public will continue their present intelligent appreciation of the advantages of this beneficent work, there should be no difficulty in maintaining a diphtheria-free child population in the Borough, as, apart from incoming population, there are not more than 1,000 births in the Town each year.

### **Hospitals.**

*Baiter Hospital*, on the Baiter Peninsula in Poole Harbour, is kept in reserve for Smallpox cases. It has 20 beds (official capacity, 10) with an experienced Nurse as Resident Caretaker. It was not opened during the year.

*Alderney Hospital* is situated in a very healthy position 200 feet high, near the landward boundary of the Borough, on gravel soil. Its official capacity is 44 beds, and it consists of 6 blocks with administrative buildings, disinfecting station, and two motor ambulances.

Particulars of the actual condition, age, etc., of the constituent ward blocks were included in last year's Report.

The Scheme for hospitalisation of infectious diseases in East Dorset drawn up by the County Council under the Local Government Act, 1929 and approved of by the Ministry of Health, allocates a minimum of 74 beds for the 100,000 population of the area. The provision of further accommodation to give more available reserve for the Borough, and to enable hospital services to be continued for West Hampshire districts already served, is being considered in a remodelling plan which would result in a total ward supply of 94 beds.

*Admissions.* During the year 125 cases were admitted, compared with 257 in 1932. Of these, 78 were Borough cases, with 5 deaths, one from Wimborne Minster, 4 from Wimborne and Cranborne Rural District, 3 from Wareham and Purbeck Rural District with 1 death, 2 from Swanage, 19 from Christchurch, 7 from Ringwood and Fordingbridge Rural District, and 11 from military stations in the County.

Of the Borough deaths, 2 were cases of haemorrhagic diphtheria. Two deaths from scarlatina maligna occurred in a family in which the mother had been under treatment for a severe septic throat condition. The fifth was a case of typhoid fever, in which the infection was possibly contracted elsewhere, with severe haemorrhage and perforation.

The external death was due to diaphragmatic paralysis following on a severe attack of acute anterior poliomyelitis.

Table H gives further particulars of the admissions, and Table I summarises the notified infections by age incidence.

*Disinfection.* The steam disinfecter is of the jacket type, working up to 40 lbs. pressure per square inch, manufactured by Manlove, Alliott & Co., Nottingham.

### TUBERCULOSIS.

The Dorset County Council is the Local Authority for the prevention and treatment of Tuberculosis.

Particulars are given below of the position as regards the incidence of the disease for recent years.

Year	First Notifications		Formerly notified new residents.		Deaths.	
	Pulmonary	Other Forms	Pulmonary	Other Forms	Pulmonary	Other Forms
1922	67	9	3	1	51	6
1923	56	14	9	—	45	11
1924	64	11	2	—	40	7
1925	59	18	12	1	33	6
1926	50	10	13	—	46	5
1927	54	8	16	—	36	6
1928	45	11	6	1	32	9
1929	62	11	4	—	30	5
1930	61	14	3	1	48	6
1931	55	28	8	—	48	12
1932	49	9	9	—	38	7
1933	59	20	15	—	39	12

For the year under review, the details are as follows :—

Age Period	New Cases.				Deaths.			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
0	—	—	—	—	—	—	—	—
1	—	1	—	1	—	1	—	—
5	3	—	6	4	2	—	2	1
15	8	7	1	4	1	6	1	3
25	9	12	1	2	4	5	2	1
35	6	7	1	—	5	3	—	—
45	9	3	—	1	7	—	—	1
55	3	3	—	1	1	2	—	1
65 & upwards	3	—	—	—	2	—	—	—
Totals	41	33	9	13	22	17	5	7

On absorption of Canford Parish in April, 1933, 12 previously notified respiratory cases and 5 non-respiratory cases were added to the Register.

Of the deaths from the respiratory form :—

13	had been notified during	1933 ;
7	" " " "	1932 ;
2	" " " "	1931 ;
1	" " " "	1930 ;
2	" " " "	1929 ;
3	" " " "	1926 ;
2	" " " "	1925 ;
1	" " " "	1924 ;
1	" " " "	1919 ;
1	" " " "	1916 ;
5	" " " "	year uncertain.

1 had not been ascertained prior to post-mortem.

The proportion of notified and non-notified pulmonary cases dying in recent years has been as follows :—

	1926	1927	1928	1929	1930	1931	1932	1933
Previously notified	40	32	29	27	43	45	37	38
Not notified	6	4	3	3	5	3	1	1
Total	46	36	32	30	48	48	38	39

Of the non-pulmonary deaths, 6 were abdominal, 3 meningitis, 2 bone and 1 genito-urinary cases.

Occasion has not arisen during the year for applying the operation of Section 62 of the Public Health Act, 1925 (compulsory removal to hospital of certain cases of pulmonary tuberculosis), or of the Public Health (Prevention of Tuberculosis) Regulations, 1925, controlling tuberculous subjects in the milk trade.

The Laboratories are approved by the Ministry of Agriculture and Fisheries as a pathological institute for the purpose of examinations in connection with Tuberculosis in Animals (Tuberculosis Order of 1925).

#### BLIND PERSONS ACT, 1920.

Care of the blind in Poole under this Act is a function of the County Council, who work in co-operation with the Dorset County Association for the Blind. On the books of the District Visitor of the Association there are 110 names over ordinary school age. Of these, no fewer than 34 are over 70 years of age, 17 over 80 years, and 2 over 90 years.

Of children blind or partially blind under 16 years there are 6 under the supervision of the Education or the Maternity and Child Welfare Committee, viz. :—

- 1 girl, over ordinary school age, at home.
- 1 girl at ordinary school.
- 2 girls at a residential school.
- 2 girls for whom arrangements are being made for a residential school.

### VENEREAL DISEASES.

Administration and treatment is in the hands of the County Council. A Clinic in the Borough itself is very necessary. At present the nearest available Centre is at the Royal Victoria Hospital. No alteration in this respect has been effected during the year.

Three persons who presented themselves to the Medical Officer of Health for advice were referred thither for treatment.

The number of patients who attended the Clinic registered as resident in the Borough of Poole has been 93 in 1930, 139 in 1931, 160 in 1932, and 146 in 1933.

It is unfortunate that such a large proportion, viz., 45, do not complete treatment. In some cases, however, this only means that the treatment is continued at another centre, and not necessarily that treatment has ceased.

Sex	Syphilis			Gonorrhoea			Diagnosed as Non-Venereal
	Treatment completed	Ceased attendance before completion of treatment	Still under treatment	Treatment completed	Ceased attendance before completion of treatment	Still under treatment	
M.	0	7	18	12	24	20	16
F.	1	8	11	10	6	9	4
	1	15	29	22	30	29	20
TOTAL 146.							

### BOROUGH PUBLIC HEALTH LABORATORIES.

The sphere of gratuitous utility of the Public Health Laboratories includes the Hospitals in the Borough, the Medical Practitioners of the Borough, the School Medical Service, the Maternity and Child Welfare Service and the Food Inspectors.

For reports on materials coming from outside the Borough small charges are made.

Charges are also made for special work, such as preparation of vaccines, bacteriological tests of water samples, etc.



The work of the year is shown in the Table below :—

LABORATORY EXAMINATIONS FOR YEAR 1933.

*Diphtheria Swabs.*

Isolation Hospital	...	...	343
Nurses and Clinics	...	...	711
Medical Practitioners	...	...	164
Institutions	...	...	105
County	...	...	74
Total			—1397

*Other Specimens.*

Urines (M. C. W. Clinics)	...	...	56
Urines	...	...	149
Sputa	...	...	83
Tissues	...	...	1
Blood Counts	...	...	8
Hairs for Ringworm	...	...	17
Pus and Pus Swabs	...	...	6
Faeces	...	...	13
Cerebro Spinal Fluid	...	...	3
Bact. Examination of Water	...	...	33
Urethral, Vaginal, Cervical Swabs, etc.	...	...	33
Blood for Typhoid Group	...	...	10
Blood for Wassermann test	...	...	38
Pleural Fluids, etc.	...	...	2
Specimens from Veterinary Surgeon	...	...	3
Throat Swabs for Streptococci	...	...	48
Blood Cultures	...	...	2
Analysis of Milk Samples	...	...	29
Oyster Examination	...	...	1
Analysis of Breast Milk	...	...	1
Blood Films for Filaria	...	...	1
Bacteriological Examination of Milk	...	...	1
			— 538

Total No. of Examinations	...	1935
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In 1932, 3364 examinations and reports were made.

# **HOSPITALS, MEDICAL SERVICES AND NURSING ARRANGEMENTS AVAILABLE FOR THE BOROUGH.**

## *(1) Hospitals and Sanatoria.*

<i>Classification</i>	<i>Name</i>	<i>Situation</i>	<i>Accommo- dation</i>	<i>Provided by</i>
Tuberculosis ...	Various	Various	72 for County	County Council
Maternity ...	Cornelia Hospital	Longfleet	5 beds	Borough Council
Children under 5	Cornelia Hospital	Longfleet	8 cots	Borough Council
Infectious Diseases	Borough Isolation	Upper Parkstone	44 beds	Borough Council
Smallpox, etc.	Baiter Isolation	Poole	10 beds	Borough Council
Children's ... Convalescent	Swanage Memorial	Swanage	3 for Borough	Royal Red Cross Society
Venereal Disease	Royal Victoria	Boscombe	4 beds	County Council
General ...	Cornelia Hospital	Longfleet	105 beds	Voluntary effort

(2) *Clinics and Treatment Centres.*

Classification.		Situation.	Provided by
Tuberculosis	...	King Street, Poole	County Council
Maternity and Child Welfare	...	67, Market Street Poole	Borough Council
" "	...	Branksome Council Buildings	Borough Council
Maternity and Child Welfare Association Consultation Centre and School for Mothers	...	Poole	Voluntary effort subsidised by Borough Council
" "	...	Upper Parkstone	
" "	...	Heatherlands	
" "	...	Newtown	
" "	...	Longfleet	
Elementary Schools, Minor Ailments	...	67, Market Street, Poole	Borough Council
" "	...	Council Buildings, Branksome	" "
Dental Operative Clinic	...	67, Market Street, Poole	" "
Nose and Throat Operative Clinic	...	Cornelia Hospital	" "
Eye Clinic	...	" "	" "
X-Ray Clinic	...	" "	" "
Diphtheria Immunisation	...	67, Market Street Poole	Borough Council
" "	...	Council Buildings, Branksome.	" "
Venereal Diseases	...	Boscombe	County Council

(3) *Professional Nursing in the Home.*

*General.* Three District Nurses for the Parkstone area are provided by the Parkstone District Nursing Association. One District Nurse, for work in the Poole, Longfleet and Oakdale districts, is provided by the Poole District Nursing Association, and one in Hamworthy by the Hamworthy Association.

These Associations are affiliated to the Dorset County Nursing Association.

*Maternity.* Twenty-six certified Midwives are at present practising in the Borough. A further 3 are proprietors of Nursing Homes, which are also Maternity Homes.

(4) *Ambulance facilities.*

(a) *Infectious Diseases.* Two motor ambulances are stationed at the Borough Hospital. The newer vehicle is a Morris St. John type, capable of carrying 2 stretchers and 3 sitting cases. The area covered by these includes a considerable portion of the East of the County of Dorset, and Christchurch in Hampshire.

(b) *Non-infectious and Accident Cases.* A Morris motor ambulance, which was presented to the Corporation by the Poole Carnival Committee, is maintained at Parkstone for general non-infectious work.

There is also a hand ambulance quartered at Parkstone Park.

(5) *Other Institutional Provision.*

*Illegitimate Infants.* The Hants and Dorset Babies' Home, in Commercial Road, Parkstone, is capable of boarding 23 infants. It receives an annual grant from Government funds, and is subject to supervision by the Medical Officer of Health.

### PROPAGANDA IN HEALTH EDUCATION.

"Empire Health Week"—a movement introduced by the Royal Sanitary Institute in 1921, has been advanced in Poole each year by a method which, while it entails a heavy personal effort on the part of the Medical Officer of Health, has been found amply to justify itself in results. A suitable Health subject, which has bearing on the everyday family life of the community, is selected. In 1933 the subject was "Man His Own Medicine Chest." By arrangement with employers of labour, women's organisations, schools, etc., a time table for the week is drawn up. The Medical Officer takes up the same subject with all his audiences, in a manner suitable to each. By this means, in many cases, father, mother, and children hear different aspects of the same subject, and the discussion is carried into the home.

The subject chosen in 1933 lent itself well to one of the preventive activities of the Health Department which is being assiduously practised. Thus it was possible, by making references to the natural defences of a healthy body against the inroads of disease, to lead up to the marvellous powers of the blood as a potential storehouse of chemicals capable of waging a successful war against harmful germs, and to emphasise in particular the use of this storehouse in effecting immunisation against that most treacherous disease, Diphtheria.

After the school talks are concluded, the elder scholars of the elementary schools take part in a competitive Essay on a simple subject associated with the main title—the subject being unknown until the Essay hour. The winners of prizes—in 1933, three dozen hikers' outfits—receive their awards at the hands of the Mayor in open Council.



It is a pleasure to be able to acknowledge in these pages the gratifying zeal and public spirit shown by the large employers of labour of the Borough, which enables the Medical Officer to reach, even once a year, the collected employees, in their working surroundings, for such a purpose.

The result in the year under review was that this endeavour reached some 2,000 men, 1,000 women and 3,500 children in the course of no fewer than 41 talks.



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- A.—Vital Statistics—Quinquennial.
- B.—Deaths from all Causes.
- C.—Infant Mortality.
- D.—Births.
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TABLE A.

## Vital Statistics, Quinquennial.

Year	Mid-Year population	Infantile Mortality per 1,000 births.	Per 1,000 of Population.			
			Birth Rate.	Marriage Rate.	Death Rate. (uncorrected)	Cancer Death Rate.  Pulmonary Tuberculosis Death Rate
1885	12957	86	39.5		18.7	
1890	14027	82	26.9		14.6	
1895	17050	126	29.5		15.1	
1900	18991	131	27.7		15.3	1.3
1905	21804	113	26.7		15.7	.9
1910	34168*	82	26.0	15.4	12.7	1.3
1915	42800	93	18.7	18.6	13.2	.8
1920	43400	75	23.6	22.0	10.8	1.1
1925	46150	71.7	18.1	16.7	11.7	.9
1930	56150	57.6	16.7	15.4	12.39	1.60
1931	56780	43.2	15.85	16.5	12.49	1.87
1932	58230	55.2	15.8	15.1	11.70	1.81
1933	63510*	46.4	16.0	16.1	11.71	1.58
England & Wales, 1933		64	14.4	15.7	12.3	1.50
						—

\* Enlarged Borough.

## Acknowledgments

Manufacture of ethyl alcohol

TABLE B

TOTAL DEATHS REGISTERED IN THE BOROUGH :—702.

TRANSFERABLE DEATHS :—(a) of non-residents registered in the Borough :—44.

(b) of residents not registered in the Borough :—86.

NETT DEATHS BELONGING TO THE BOROUGH :—744 RATE :—11.71

CORRECTED DEATH RATE :—9.89

## CAUSES OF AND AGES AT DEATH DURING 1933.

Causes of Death.	All Ages.	Under 1 Year.	1 and under 2 Years	2 and under 3 Years	3 and under 4 Years	4 and under 5 Years	5 and under 6 Years	10 and under 15 Years	15 and under 20 Years	20 and under 25 Years	25 and under 30 Years	30 and under 35 Years	35 and under 40 Years	40 and under 45 Years	45 and under 50 Years	50 and under 55 Years	55 and under 60 Years	60 and under 65 Years	65 and under 70 Years	70 and under 75 Years	75 and upward	Total Deaths in Institution
All Causes :— Certified	743	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Uncertified	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
1. Typhoid and Paratyphoid Fevers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Measles	2	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
3. Scarlet Fever	2	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
4. Whooping Cough	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. Diphtheria	2	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2
6. Influenza	18	1	—	—	—	—	—	—	—	1	—	1	2	—	1	—	1	2	1	4	4	1
7. Encephalitis Lethargica	2	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	1
8. Cerebro-Spinal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9. Tuberculosis of respiratory system	39	—	1	—	—	—	—	2	5	2	3	5	4	5	3	—	5	—	2	—	2	12
10. Other Tuberculous disease	12	—	—	—	—	—	2	1	2	2	1	1	—	—	1	1	1	—	—	—	—	3
11. Syphilis	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
12. G.P.I. Tabes Dorsalis	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
13. Cancer, Malignant Disease	95	—	—	—	—	—	—	—	—	2	1	—	2	7	7	5	10	13	16	14	18	15
14. Diabetes	4	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	2	1
15. Cerebral Haemorrhage, etc.	109	—	—	—	—	—	—	—	—	1	—	1	—	2	1	4	5	9	16	20	50	7
16. Heart Disease	144	—	—	—	—	—	2	—	—	—	2	1	2	6	2	8	8	12	16	27	58	16
17. Aneurysm	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	1	—
18. Other Circulatory Diseases	2	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—
19. Bronchitis	38	2	1	—	—	—	—	—	—	—	—	—	3	1	1	3	2	4	4	5	12	1
20. Pneumonia (all forms)	44	4	2	2	—	—	2	—	—	3	—	—	1	—	2	—	5	4	2	3	14	10
21. Other Respiratory Diseases	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—
22. Peptic Ulcer	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—
23. Diarrhoea, etc.	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24. Appendicitis	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—	2
25. Cirrhosis of Liver	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
26. Other Diseases of Liver	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
27. Other Digestive Diseases	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	3	1	1
28. Acute and Chronic Nephritis	25	—	—	—	—	—	—	1	—	—	—	—	—	1	3	—	3	—	6	2	9	2
29. Puerperal Sepsis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30. Other Puerperal Causes	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
31. Congenital Debility, etc.	35	33	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
32. Senility	37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3	32	6
33. Suicide	13	—	—	—	—	—	—	—	1	1	—	—	1	—	3	2	—	3	1	1	—	—
34. Other Violence	19	—	—	—	—	—	2	—	1	4	3	2	1	—	1	—	1	—	1	1	2	8
35. Other Defined Diseases	76	2	—	—	1	—	2	1	1	—	1	1	—	4	9	5	4	5	11	10	19	16
36. Causes Ill-defined or Unknown	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
	744	45	5	2	3	2	11	6	10	18	13	12	17	27	36	33	46	58	81	94	225	115



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1968	1	471-480	Chapter 47
1968	1	481-490	Chapter 48
1968	1	491-500	Chapter 49
1968	1	501-510	Chapter 50
1968	1	511-520	Chapter 51
1968	1	521-530	Chapter 52
1968	1	531-540	Chapter 53
1968	1	541-550	Chapter 54
1968	1	551-560	Chapter 55
1968	1	561-570	Chapter 56
1968	1	571-580	Chapter 57
1968	1	581-590	Chapter 58
1968	1	591-600	Chapter 59
1968	1	601-610	Chapter 60
1968	1	611-620	Chapter 61
1968	1	621-630	Chapter 62
1968	1	631-640	Chapter 63
1968	1	641-650	Chapter 64
1968	1	651-660	Chapter 65
1968	1	661-670	Chapter 66
1968	1	671-680	Chapter 67
1968	1	681-690	Chapter 68
1968	1	691-700	Chapter 69
1968	1	701-710	Chapter 70
1968	1	711-720	Chapter 71
1968	1	721-730	Chapter 72
1968	1	731-740	Chapter 73
1968	1	741-750	Chapter 74
1968	1	751-760	Chapter 75
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1968	1	911-920	Chapter 91
1968	1	921-930	Chapter 92
1968	1	931-940	Chapter 93
1968	1	941-950	Chapter 94
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**TABLE C.**  
**INFANT MORTALITY DURING 1933.**

Causes of Death.	Deaths from stated causes at various ages under 1 year.									Total Deaths under one year.
	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	1-3 months	3-6 months	6-9 months	9-12 months	
Whooping Cough ...	—	—	—	—	—	—	—	1	—	1
Influenza ...	—	—	—	—	—	—	1	—	—	1
Bronchitis ...	—	—	—	—	—	—	—	1	—	1
Pneumonia ...	—	—	—	—	—	—	—	3	2	5
Diarrhoea and Enteritis	—	1	—	1	2	1	—	—	—	3
Congenital Malformation	2	—	—	—	2	—	1	—	—	3
Congenital Debility ...	—	1	—	—	1	1	—	1	—	3
Icterus ...	—	—	1	—	1	—	—	—	—	1
Premature Birth ...	13	2	1	2	18	1	—	—	—	19
Injury at Birth ...	3	1	—	—	4	—	—	—	—	4
Atelectasis ...	1	—	—	—	1	—	1	—	—	2
Suffocation ...	2	—	—	—	2	—	—	—	—	2
<b>Total</b> ...	<b>21</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>45</b>

1000

INTERNET SUBMITTING ONLINE 10.15

TABLE D.

## BIRTHS.

	Notified by			Not Notified	Total	Stillborn		
	Doctors	Midwives	Parents			Notified by		
						Doctors	Midwives	Parents
Legitimate	183	266	11	—	460	9	19	—
	173	285	11	—	469	12	7	—
Illegitimate	5	16	—	—	21	—	—	—
	6	14	—	—	20	1	—	—
Total	188	282	11	—	481	9	19	—
	179	299	11	—	489	13	7	—
Grand Total	367	581	22	—	970	22	26	—

TOTAL BIRTHS—1,018.

Year	1990				1991				1992				1993				1994			
	Jan	Feb	Mar	Apr	Jan	Feb	Mar	Apr	Jan	Feb	Mar	Apr	Jan	Feb	Mar	Apr	Jan	Feb	Mar	Apr
1990	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1991	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1992	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1993	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1994	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

1990

1991



**TABLE E.**

**Housing.**

Number of New Houses erected during the year :—

(a) Total (including numbers given separately under (b))	...	679
(i) By the Local Authority	...	—
(ii) By other Local Authorities	...	—
(iii) By other bodies or persons	...	632
(b) With State assistance under the Housing Acts :—		
(a) For the purpose of Part II. of the Act of 1925	...	—
(b) For the purpose of Part III. of the Act of 1925	...	—
(c) For other purposes	...	47
<b>1. Inspection of Dwelling-houses during the year :—</b>		
(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	...	599
(b) Number of inspections made for the purpose	...	1391
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	...	367
(b) Number of inspections made for the purpose	...	713
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	221
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	...	320
<b>2. Remedy of Defects during the Year without Service of Formal Notices.</b>		
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	...	165
<b>3. Action under Statutory Powers during the Year :—</b>		
<i>A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :</i>		
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	...	15
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—		
(a) By owners	...	9
(b) By Local Authority in default of owners	...	—
<i>B.—Proceedings under Public Health Acts :</i>		
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	...	49
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :		
(a) By owners	...	46
(b) By Local Authority in default of owners	...	2
<i>C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—</i>		
(1) Number of dwelling-houses in respect of which Demolition Orders were made	...	6
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	...	3
<i>D.—Proceedings under Section 20 of the Housing Act, 1930 :—</i>		
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	...	—
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	...	—



TABLE F.

## Report of Sanitary Inspectors for the Year 1933.

Poole District, Mr. Wheeler ; Branksome District, Mr. Trim ; Longfleet

District, Mr. Power ; Parkstone District, Mr. Hollox ;

Canford District, Mr. Parham.

	District.				
	Poole	Brank- some	Long- fleet	Park- stone	Canford
Total Number of visits to premises ...	4118	3444	4205	3831	379
Visits re infectious and other diseases ...	38	52	46	58	5
Premises disinfected after infectious diseases ...	33	41	29	38	2
Premises disinfected after other diseases ...	8	17	8	—	—
House drains smoke tested ...	202	64	32	20	—
House drains water tested ...	104	160	36	97	—
Drains repaired, cleaned &c. ...	46	32	40	24	—
<i>Inspection of Licensed or Registered Premises.</i>					
Factories, workshops or work-places ...	106	36	23	115	31
Slaughterhouses ...	81	279	642	438	84
Dairies and milkshops ...	129	97	85	330	24
Cowsheds ...	26	19	58	50	130
Bakehouses ...	70	35	19	70	—
Houses Let-in-Lodgings ...	—	—	—	1	—
Common Lodging Houses ...	70	9	—	—	—
<i>Inspections.</i>					
Butchers' premises ...	578	680	543	548	43
Greengrocers' premises ...	224	454	724	237	26
Fishmongers' premises ...	227	345	425	173	30
Fish Market ...	30	—	—	—	—
Schools ...	43	2	21	—	—
Ice Cream Premises ...	66	14	—	89	—
Picture houses ...	25	9	30	—	—
Lavatories ...	77	54	254	118	—
Other premises ...	1167	689	1017	490	—
Inspections of work in progress ...	532	400	105	254	—
<i>Food and Drugs Acts.</i>					
Samples of food, &c., taken ...	16	58	54	53	—
Food destroyed : Offals ...	...	...	...	...	...
Beef ...	...	...	...	...	...
Mutton ...	...	...	...	...	...
Pork ...	...	...	...	...	...
Fish ...	...	...	...	...	...
Corned Beef ...	...	...	...	...	...
<i>Nuisances and Defects.</i>					
Premises requiring repair ...	168	41	104	19	4
Premises requiring cleansing or limewashing ...	125	43	10	32	13
Defective W.C. fittings ...	89	24	12	25	—
Defective yard surfaces ...	57	7	4	—	—
Defective eaves and downspouts ...	97	24	23	9	4
Defective sinks ...	77	8	53	11	2
Defective urinals ...	—	—	5	1	—
Defective manure pits ...	—	—	1	3	—
Animals improperly kept ...	—	3	2	2	1
Overcrowding ...	—	4	1	25	—
Offensive accumulations ...	15	23	18	19	5
Other nuisances ...	48	69	80	45	—
Informal Notices served ...	60	69	85	87	19
“ ” complied with ...	54	45	75	64	19
Statutory Notices served ...	5	19	9	1	—
“ ” complied with ...	18	15	12	3	—
<i>Diseases of Animals Acts.</i>					
Visits made ...	21	7	18	10	2
Movement Licences (within the Borough) ...	—	—	—	—	—
Movement Licences (outside the Borough) ...	—	—	—	—	—
Reports to Board of Agriculture ...	—	2	3	4	—
Cautions ...	—	—	—	—	—
Prosecutions ...	—	—	—	—	—





TABLE G.  
WORK DONE UNDER THE FOOD AND DRUGS ACTS.

	Samples.						
	Formal	Informal	Total	Genuine	Adulterated	Vendor cautioned	Vendor prosecuted.
Milk ... ..	78	—	78	*72	3	3	—
Demerara Sugar ... ..	1	—	1	1	—	—	—
Butter ... ..	12	—	12	12	—	—	—
Lard ... ..	2	—	2	2	—	—	—
Margarine ... ..	7	—	7	7	—	—	—
Tea ... ..	6	—	6	6	—	—	—
Self-raising Flour ... ..	10	—	10	10	—	—	—
Baking Powder ... ..	2	—	2	2	—	—	—
Custard Powder ... ..	1	—	1	1	—	—	—
Ground Ginger ... ..	1	—	1	1	—	—	—
Dried Mixed Herbs ... ..	1	—	1	1	—	—	—
Cornflour ... ..	1	—	1	1	—	—	—
Ice Cream ... ..	13	1	14	13	1	1	—
Cheese ... ..	3	—	3	3	—	—	—
Sausages ... ..	2	—	2	2	—	—	—
Separated Milk ... ..	3	—	3	3	—	—	—
Skimmed Milk ... ..	3	—	3	2	1	1	—
Bordeaux Wine ... ..	—	1	1	1	—	—	—
Dripping ... ..	2	—	2	2	—	—	—
White Pepper ... ..	6	—	6	6	—	—	—
Granulated Sugar ... ..	1	—	1	1	—	—	—
Egg Powder ... ..	1	—	1	1	—	—	—
Milk Pudding Mixture ... ..	1	—	1	1	—	—	—
Blancmange Powder ... ..	1	—	1	1	—	—	—
Sultanas ... ..	2	—	2	2	—	—	—
Raisins ... ..	3	—	3	3	—	—	—
Currants ... ..	1	—	1	1	—	—	—
Vinegar ... ..	4	—	4	4	—	—	—
Suet ... ..	4	—	4	4	—	—	—
Coffee ... ..	3	—	3	3	—	—	—
Cream ... ..	1	—	1	1	—	—	—
Cocoa ... ..	3	—	3	3	—	—	—
	179	2	181	173	5	5	—

\* 3 Broken in transit.

WATER QUALITY DATA  
 1964-1965

STATION	DATE	TEMP	PH	D.O.	T.S.	COD	BOD	CL	NO <sub>3</sub> -N	NO <sub>2</sub> -N	AMMONIA-N	PO <sub>4</sub> -P	CO <sub>3</sub> -P	CO <sub>2</sub>	CHLOROPHYLL	PLANKTON	REMARKS
1	1/15/64	10.5	7.2	8.5	120	15	2.5	1.0	1.5	0.5	0.2	0.1	0.05	0.02	1.5	1.0	Clear
2	1/22/64	11.0	7.5	9.0	130	18	3.0	1.2	1.8	0.6	0.3	0.1	0.05	0.02	1.8	1.2	Clear
3	2/5/64	12.0	7.8	9.5	140	20	3.5	1.5	2.0	0.8	0.4	0.1	0.05	0.02	2.0	1.5	Clear
4	2/12/64	13.0	8.0	10.0	150	22	4.0	1.8	2.2	1.0	0.5	0.1	0.05	0.02	2.2	1.8	Clear
5	2/19/64	14.0	8.2	10.5	160	25	4.5	2.0	2.5	1.2	0.6	0.1	0.05	0.02	2.5	2.0	Clear
6	2/26/64	15.0	8.5	11.0	170	28	5.0	2.2	2.8	1.5	0.8	0.1	0.05	0.02	2.8	2.2	Clear
7	3/5/64	16.0	8.8	11.5	180	30	5.5	2.5	3.0	1.8	1.0	0.1	0.05	0.02	3.0	2.5	Clear
8	3/12/64	17.0	9.0	12.0	190	32	6.0	2.8	3.2	2.0	1.2	0.1	0.05	0.02	3.2	2.8	Clear
9	3/19/64	18.0	9.2	12.5	200	35	6.5	3.0	3.5	2.2	1.5	0.1	0.05	0.02	3.5	3.0	Clear
10	3/26/64	19.0	9.5	13.0	210	38	7.0	3.2	3.8	2.5	1.8	0.1	0.05	0.02	3.8	3.2	Clear
11	4/2/64	20.0	9.8	13.5	220	40	7.5	3.5	4.0	2.8	2.0	0.1	0.05	0.02	4.0	3.5	Clear
12	4/9/64	21.0	10.0	14.0	230	42	8.0	3.8	4.2	3.0	2.2	0.1	0.05	0.02	4.2	3.8	Clear
13	4/16/64	22.0	10.2	14.5	240	45	8.5	4.0	4.5	3.2	2.5	0.1	0.05	0.02	4.5	4.0	Clear
14	4/23/64	23.0	10.5	15.0	250	48	9.0	4.2	4.8	3.5	2.8	0.1	0.05	0.02	4.8	4.2	Clear
15	4/30/64	24.0	10.8	15.5	260	50	9.5	4.5	5.0	3.8	3.0	0.1	0.05	0.02	5.0	4.5	Clear
16	5/7/64	25.0	11.0	16.0	270	52	10.0	4.8	5.2	4.0	3.2	0.1	0.05	0.02	5.2	4.8	Clear
17	5/14/64	26.0	11.2	16.5	280	55	10.5	5.0	5.5	4.2	3.5	0.1	0.05	0.02	5.5	5.0	Clear
18	5/21/64	27.0	11.5	17.0	290	58	11.0	5.2	5.8	4.5	3.8	0.1	0.05	0.02	5.8	5.2	Clear
19	5/28/64	28.0	11.8	17.5	300	60	11.5	5.5	6.0	4.8	4.0	0.1	0.05	0.02	6.0	5.5	Clear
20	6/4/64	29.0	12.0	18.0	310	62	12.0	5.8	6.2	5.0	4.2	0.1	0.05	0.02	6.2	5.8	Clear
21	6/11/64	30.0	12.2	18.5	320	65	12.5	6.0	6.5	5.2	4.5	0.1	0.05	0.02	6.5	6.0	Clear
22	6/18/64	31.0	12.5	19.0	330	68	13.0	6.2	6.8	5.5	4.8	0.1	0.05	0.02	6.8	6.2	Clear
23	6/25/64	32.0	12.8	19.5	340	70	13.5	6.5	7.0	5.8	5.0	0.1	0.05	0.02	7.0	6.5	Clear
24	7/2/64	33.0	13.0	20.0	350	72	14.0	6.8	7.2	6.0	5.2	0.1	0.05	0.02	7.2	6.8	Clear
25	7/9/64	34.0	13.2	20.5	360	75	14.5	7.0	7.5	6.2	5.5	0.1	0.05	0.02	7.5	7.0	Clear
26	7/16/64	35.0	13.5	21.0	370	78	15.0	7.2	7.8	6.5	5.8	0.1	0.05	0.02	7.8	7.2	Clear
27	7/23/64	36.0	13.8	21.5	380	80	15.5	7.5	8.0	6.8	6.0	0.1	0.05	0.02	8.0	7.5	Clear
28	7/30/64	37.0	14.0	22.0	390	82	16.0	7.8	8.2	7.0	6.2	0.1	0.05	0.02	8.2	7.8	Clear
29	8/6/64	38.0	14.2	22.5	400	85	16.5	8.0	8.5	7.2	6.5	0.1	0.05	0.02	8.5	8.0	Clear
30	8/13/64	39.0	14.5	23.0	410	88	17.0	8.2	8.8	7.5	6.8	0.1	0.05	0.02	8.8	8.2	Clear
31	8/20/64	40.0	14.8	23.5	420	90	17.5	8.5	9.0	7.8	7.0	0.1	0.05	0.02	9.0	8.5	Clear
32	8/27/64	41.0	15.0	24.0	430	92	18.0	8.8	9.2	8.0	7.2	0.1	0.05	0.02	9.2	8.8	Clear
33	9/3/64	42.0	15.2	24.5	440	95	18.5	9.0	9.5	8.2	7.5	0.1	0.05	0.02	9.5	9.0	Clear
34	9/10/64	43.0	15.5	25.0	450	98	19.0	9.2	9.8	8.5	7.8	0.1	0.05	0.02	9.8	9.2	Clear
35	9/17/64	44.0	15.8	25.5	460	100	19.5	9.5	10.0	8.8	8.0	0.1	0.05	0.02	10.0	9.5	Clear
36	9/24/64	45.0	16.0	26.0	470	102	20.0	9.8	10.2	9.0	8.2	0.1	0.05	0.02	10.2	9.8	Clear
37	10/1/64	46.0	16.2	26.5	480	105	20.5	10.0	10.5	9.2	8.5	0.1	0.05	0.02	10.5	10.0	Clear
38	10/8/64	47.0	16.5	27.0	490	108	21.0	10.2	10.8	9.5	8.8	0.1	0.05	0.02	10.8	10.2	Clear
39	10/15/64	48.0	16.8	27.5	500	110	21.5	10.5	11.0	9.8	9.0	0.1	0.05	0.02	11.0	10.5	Clear
40	10/22/64	49.0	17.0	28.0	510	112	22.0	10.8	11.2	10.0	9.2	0.1	0.05	0.02	11.2	10.8	Clear
41	10/29/64	50.0	17.2	28.5	520	115	22.5	11.0	11.5	10.2	9.5	0.1	0.05	0.02	11.5	11.0	Clear
42	11/5/64	51.0	17.5	29.0	530	118	23.0	11.2	11.8	10.5	9.8	0.1	0.05	0.02	11.8	11.2	Clear
43	11/12/64	52.0	17.8	29.5	540	120	23.5	11.5	12.0	10.8	10.0	0.1	0.05	0.02	12.0	11.5	Clear
44	11/19/64	53.0	18.0	30.0	550	122	24.0	11.8	12.2	11.0	10.2	0.1	0.05	0.02	12.2	11.8	Clear
45	11/26/64	54.0	18.2	30.5	560	125	24.5	12.0	12.5	11.2	10.5	0.1	0.05	0.02	12.5	12.0	Clear
46	12/3/64	55.0	18.5	31.0	570	128	25.0	12.2	12.8	11.5	10.8	0.1	0.05	0.02	12.8	12.2	Clear
47	12/10/64	56.0	18.8	31.5	580	130	25.5	12.5	13.0	11.8	11.0	0.1	0.05	0.02	13.0	12.5	Clear
48	12/17/64	57.0	19.0	32.0	590	132	26.0	12.8	13.2	12.0	11.2	0.1	0.05	0.02	13.2	12.8	Clear
49	12/24/64	58.0	19.2	32.5	600	135	26.5	13.0	13.5	12.2	11.5	0.1	0.05	0.02	13.5	13.0	Clear
50	12/31/64	59.0	19.5	33.0	610	138	27.0	13.2	13.8	12.5	11.8	0.1	0.05	0.02	13.8	13.2	Clear

1. Station 1 is located at the mouth of the river.

TABLE H.

CASES ADMITTED TO ALDERNEY HOSPITAL DURING THE YEAR 1933.

	Admitted from Borough	Admitted from other Districts	Died during the year	Total Number of cases admitted
Diphtheria, faucial ...	10	2	2	12
" nasal ...	2	—	—	2
" carrier ...	3	—	—	3
Admitted as Diphtheria but proving to be otherwise	3	1	—	4
Scarlet Fever ...	47	28	2	75
Admitted as Scarlet Fever, but proving to be otherwise	2	—	—	2
Epidemic Parotitis ...	—	1	—	1
Acute Anterior Poliomyelitis ...	—	1	1	1
Encephalitis Lethargica ...	1	—	—	1
Enteric Fever ...	2	—	1	2
Puerperal Fever or Pyrexia ...	3	2	—	5
Bacillary Dysentery ...	—	1	—	1
Ophthalmia Neonatorum ...	1	—	—	1
Erysipelas ...	2	1	—	3
Morbili ...	1	6	—	7
Cerebro-Spinal Meningitis ...	—	1	—	1
Admitted as cerebro-spinal meningitis, but found to be Scarlet Fever	—	1	—	1
Rubella ...	—	1	—	1
Pertussis and Broncho-Pneumonia ...	—	1	—	1
Total	78	47	6	125

# TABLE

THE RATE AND GRADE BETWEEN THERMAL OF DIFFERENT

No.	Name of the substance	Specific heat	Thermal conductivity
1	Water	1.000	0.008
2	Ice	0.500	0.002
3	Steam	0.480	0.010
4	Aluminum	0.215	0.005
5	Copper	0.092	0.009
6	Iron	0.105	0.007
7	Steel	0.110	0.006
8	Glass	0.170	0.004
9	Wood	0.170	0.003
10	Paper	0.170	0.002



TABLE I.

## CASES OF INFECTIOUS DISEASES NOTIFIED DURING 1933.

Notifiable Diseases	At all ages	Number of Cases Notified.											
		Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 & upwards
Diphtheria ...	13	—	—	—	—	1	6	4	1	1	—	—	—
Pneumonia ...	42	—	—	—	—	2	5	1	4	11	6	9	4
Scarlet Fever ...	53	—	2	1	4	8	15	13	3	5	2	—	—
Erysipelas ...	8	—	—	—	—	—	—	—	—	2	1	4	1
Encephalitis Lethargica ...	4	—	—	—	—	—	—	—	—	3	1	—	—
Puerperal Pyrexia ...	5	—	—	—	—	—	—	—	1	4	—	—	—
Puerperal Septicaemia ...	3	—	—	—	—	—	—	—	—	3	—	—	—
Typhoid Fever ...	1	—	—	—	—	—	—	—	—	1	—	—	—
Infantile Paralysis ...	1	—	—	1	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	2	2	—	—	—	—	—	—	—	—	—	—	—
	132	2	2	2	4	11	26	18	9	30	10	13	5

ACER THERMOCOOL 3000 15.6" 76-1113

T. J. O'Donnell

TABLE J.

## 1.—Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers prosecuted.
<b>Factories</b> ... .. (Including Factory Laundries)	60	10	—
<b>Workshops</b> ... .. (Including Workshop Laundries)	290	23	—
<b>Workplaces</b> ... .. (Other than Outworkers' premises)	42	—	—
<b>Total</b> ... ..	392	33	—

## 2.—Defects found in Factories, Workshops and Workplaces.

Particulars.	Number of Defects.			Number of offences in respect to which Prosecutions were instituted.
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness ... ..	22	16	—	—
Want of ventilation ... ..	1	1	—	—
Overcrowding ... ..	—	—	—	—
Want of drainage of floors... ..	10	10	—	—
Other Nuisances ... ..	7	7	—	—
Sanitary accommodation insufficient ... ..	—	—	—	—
unsuitable or defective ... ..	10	9	—	—
not separate for sexes ... ..	—	—	—	—
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground Bakehouse (s.101) ... ..	—	—	—	—
Other offences ... ..	1	1	1	—
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers Order, 1921). ... ..				
<b>Total</b> ... ..	51	44	1	—

\*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

# Table 1

Summary of the results of the analysis

Variable		Mean		Standard Deviation		Minimum		Maximum	
Age	Mean	25.5	3.2	18.0	35.0	15.0	30.0	35.0	40.0
	Standard Deviation	3.2		3.2		3.2		3.2	
Gender	Male	15.0	3.0	10.0	20.0	5.0	15.0	20.0	25.0
	Female	10.0	2.0	5.0	15.0	0.0	10.0	15.0	20.0
Education	High School	5.0	1.0	3.0	7.0	1.0	5.0	7.0	10.0
	College	10.0	2.0	5.0	15.0	5.0	10.0	15.0	20.0
Income	Low	10.0	2.0	5.0	15.0	0.0	10.0	15.0	20.0
	High	15.0	3.0	10.0	20.0	5.0	15.0	20.0	25.0
Marital Status	Married	10.0	2.0	5.0	15.0	0.0	10.0	15.0	20.0
	Single	15.0	3.0	10.0	20.0	5.0	15.0	20.0	25.0
Occupation	Unemployed	5.0	1.0	3.0	7.0	1.0	5.0	7.0	10.0
	Employed	10.0	2.0	5.0	15.0	5.0	10.0	15.0	20.0
Health Status	Good	10.0	2.0	5.0	15.0	0.0	10.0	15.0	20.0
	Poor	15.0	3.0	10.0	20.0	5.0	15.0	20.0	25.0
Social Support	Low	5.0	1.0	3.0	7.0	1.0	5.0	7.0	10.0
	High	10.0	2.0	5.0	15.0	5.0	10.0	15.0	20.0
Stress Level	Low	5.0	1.0	3.0	7.0	1.0	5.0	7.0	10.0
	High	10.0	2.0	5.0	15.0	5.0	10.0	15.0	20.0
Life Satisfaction	Low	5.0	1.0	3.0	7.0	1.0	5.0	7.0	10.0
	High	10.0	2.0	5.0	15.0	5.0	10.0	15.0	20.0

The data were collected from a survey of 100 individuals. The results are presented in the table above.

# PART II

## PORT SANITATION.

### PORT MEDICAL OFFICER'S REPORT.

(Abridged).

Poole Bay includes, in addition to the Harbour, all the landward area of waters enclosed by a line joining St. Alban's Head in the West with Hengistbury Head in the East. The Port of Poole proper extends to a line joining Poole Head with the "Bar Buoy" off Studland.

The Medical Officer of Health for the Borough is also Port Medical Officer. Dr. G. Chesney, who holds the Certificate of the London School of Tropical Medicine, is Deputy Port Medical Officer, and these are assisted by Mr. P. W. Wheeler, Cert. R.S.I., M.S.I.A., Sanitary Inspector, who is also Sanitary Inspector for the Port. Close co-operation exists between the Officers of H.M. Customs, the Harbour Master, and the Medical Officer's Department.

#### Incoming Traffic.

Period.	Total Incoming Vessels.	Tonnage	Average Ship Tonnage.
1910-1913	1621	221551	136
1921-1925	1000	161145	158
1926-1930	1313	248463	188
1931	1139	255675	225
1932	1197	253730	212
1933	1169	272042	233

I. Amount of Shipping Entering the Port during the year 1933.

**TABLE A.**

—		Number	Tonnage	Number Inspected		Number reported to be Defective	Number of vessels on which defects were remedied	Number of Vessels as reported or having had, during the voyage, infectious disease on board
				By the Medical Officer	By the Sanitary Inspector			
FOREIGN	Steamers	68	24495	7	41	1	1	—
	*Motor	53	7546	—	18	1	1	—
	Sailing	2	373	1	3	1	1	—
	Fishing	—	—	—	—	—	—	—
Total Foreign		123	32414	8	62	3	3	—
COASTWISE	Steamers	671	205608	3	133	24	24	—
	*Motor	346	32018	1	16	—	—	—
	Sailing	29	1902	2	6	—	—	—
	Fishing	—	—	—	—	—	—	—
Total Coastwise		1046	239528	5	155	24	24	—
Total Foreign and Coastwise		1169	272042	13	217	27	27	—

\* Includes mechanically propelled vessels other than steamers.



## II. *Character of Trade of the Port.*

(a) *Passenger Traffic.* There is a passenger service running between Poole, the Channel Islands, St. Malo and Cherbourg. Apart from this, the passenger services are local, communicating between the Isle of Wight, Bournemouth, Poole, Swanage and Weymouth.

**TABLE B.**  
**Passenger Traffic during 1933.**

No. of Passengers.		1st Class	2nd Class	3rd Class	Trans-migrants
INWARDS	{ Local ... ..	—	—	—	—
	{ France and Channel Islands	4486	—	15	—
	{ Other Overseas Countries ...	—	—	—	—
OUTWARDS	{ Local ... ..	—	—	—	—
	{ France and Channel Islands	4486	—	—	—
	{ Other Oversea Countries ...	—	—	—	—

The third-class passengers represent Onion-men, who return to their homes *via* either Southampton or Weymouth.

Poole is not an "Approved Port" for the purpose of control of transmigrants.

(b) *Cargo Traffic.* The bulk of the traffic during the year has been with France, Belgium, Channel Islands, Sweden, Finland and Baltic Ports, in addition to English and Scottish Ports generally.

Imports from abroad were chiefly Timber, Stone, Slates; Building Materials, Asbestos, Vegetables, and general cargoes, and by coastal traffic, Coal, Cement, Oil, Petrol, Manures, Stone, Grain, and general cargoes.

Exports were chiefly Clay, Plaster, Oil Cake, Drain Pipes and general cargoes.

## III. *Source of Water Supply.*

The water supply available for the port and shipping is that of the Town Mains, which carry a chlorinated water of high bacterial purity from deep wells in the Corfe Hills in the vicinity. There are no water boats in use in the harbour.

## IV. *Port Sanitary Regulations, 1933* (in force from 1st May, 1933).

(1)-(3) *Declarations of Health, etc.* A supply of the appropriate forms is issued to the Harbour Master, the Customs Officers, and the Pilot Office. On this form are full instructions for the guidance of masters of foreign-going ships for the use of wireless, quarantine signals, or otherwise, with location of quarantine anchorage.

This form is usually delivered to the Boarding Officer of H.M. Customs, who passes it to the Port Medical Officer.

(4) *Mooring Stations.* As the Port of Poole has no enclosed docks, an agreement has been come to between the Port Sanitary Authority, the Harbour Master, and H.M. Customs, by which the conditions of article 10 have been provisionally met by the establishment of a mooring station, where a ship can be moored without coming into contact with other ships or the shore, at a point in the Main Channel, half-way between Parkstone Shoal Light Buoy and Stakes Buoy, just clear of shipping.

(5) and (6) *Articles 14-16.* Occasion has not arisen for the application of these Articles, but arrangements and forms are in force for their operation when necessary.

(7) (a) *Arrangements for Shore Control and Prevention of Infectious Disease.* H.M. Customs and Harbour Master are in telephonic communication with the Port Medical Department. Poole is not an "approved Port" under the Aliens Order, 1920, and special premises for medical examination have not been provided in proximity to any landing stage. Medical examination rooms and waiting rooms with suitable sanitary annexes, including bath facilities, are available at all times within five minutes of the quayside.

(b) *Cleansing and disinfection of ships, persons, clothing, and other articles.* For ships' quarters, the formaldehyde spray method is in use. The Port Sanitary Authority has an agreement with the local Sanitary Authority for the use of the Borough Isolation Hospital as Disinfecting and Disinfestation Station. The steam disinfector available there is of the Washington Lyon jacket type, working to 40 lbs. pressure per square inch, manufactured by Manlove, Alliott & Co., Nottingham. At this Hospital, also, a block, with reception, bath, and discharging rooms, is provided, while clothing, etc., are treated by steam disinfection.

Five whole-time employees skilled in methods of disinfection are available on emergency, with equipment for formaldehyde and sulphur vapour treatment of quarters and articles not suitable for treatment by steam.

(c) *Isolation of Contacts.* Accommodation is provided by the local Sanitary Authority, by agreement, at the Baiter Isolation Hospital, Baiter Peninsula, in the Harbour, for the temporary accommodation of persons for whom such is required for the purposes of the Regulations.

(d) The Port Sanitary Authority makes use of the two Hospitals above-mentioned belonging to the Local Sanitary Authority, the Borough Isolation Hospital, Ringwood Road, Upper Parkstone, receiving ordinarily notifiable cases of infectious disease, Baiter Hospital being reserved for Plague, Cholera, Yellow Fever, and Smallpox.

(e) *Ambulance Transport.* Two motor ambulances, maintained at the Borough Isolation Hospital, and in telephonic com-

munication, are available. These two ambulances can take, at one journey, 3 lying-down and 4 sitting-up cases, in addition to drivers and nurses or attendants.

(f) *Supervision of Contacts.* See (5) and (6), and (7) (e), above. A twin prepaid postcard is provided for issue to contacts franked for disembarkation, to allow of notification of change of address if within 14 days of disembarkation.

(8) and (9) *Arrangements for bacteriological examination of rats and other material.* The Port Medical Officer is also Director of the Public Health Laboratories of the Sanitary Authority, where facilities exist for all routine and special examinations of bacteriological or pathological significance. The Laboratories are central, and in direct telephone communication.

(10) *Arrangements for diagnosis and treatment of Venereal Disease among Sailors under International Agreements.* Under the International Agreement regarding Venereal Diseases, suitable notices are available for all crews arriving in the Port, being issued to the Captain at first call. The Port Medical Officer is available for emergency advice. The local treatment centre is at the Victoria and West Hants Hospital, Boscombe, and to this all suitable cases are directed, with printed guidance. If an affected sailor is in port only for a very short time, he is advised as to the site of the Centre at his next port of call. Three seamen applied for treatment under this agreement, and were directed to the local treatment centre.

(11) *Interment of Dead.* The same procedure is in force as holds for hospitalised infectious diseases generally, viz., removal to place of interment in sealed coffin direct from ward or mortuary.

**TABLE C.**  
**Cases of Infectious Sickness landed from Vessels.**

Disease.	No. of Cases during the Year.		No. of Vessels concerned.	Average No. of Cases for previous 5 years.
	Passengers.	Crew.		
Morbilli	—	1	1	.2

No cases of infectious sickness occurred on vessels during a voyage, which had been disposed of prior to arrival at the Port.

#### V. *Measures against Rodents.*

Application has been made for approval of the Port for the issue of Deratisation and Deratisation Exemption Certificates under Article 28 of the International Sanitary Convention, 1926. In the meantime, ship certificates have been in each case inspected. Seven instances of lapsed certificates were found. In five cases the



"Permit for Deratisation at Home Port" was granted, and in two the authority at the next port of call was advised.

(1) *Steps taken for detection of rodent plague.* Vessels are inspected on arrival, the Master being interrogated. Periodical inspection of wharves, warehouses, etc., is made in the course of routine duties by the Sanitary Inspector and one of the Authority's ratters.

(2) *Measures taken to prevent passage of rats between ships and shore.* Zinc hawser baffles are maintained in store for this purpose.

(3) *Methods of Deratisation of*

(a) *Ships.* Sulphur dioxide fumigation is used.

(b) *Premises in vicinity of dock or quays.* Red squills, phosphorus, etc., are used, in accordance with the experience gained as to suitability of bait. In this respect, see General Public Health Section.

(4) *Measures taken for the detection of rat prevalence in ships and on shore.* Detritus from gnawing, and rat excreta, are searched for in suitable places during periodical inspections.

(5) *Rat proofing.*

(a) Many of the quayside warehouses are of old standing, and, were there any considerable trade in consumable material attractive to rodents, some difficulty might be experienced in keeping down the rat population. On the other hand, a new set of transit sheds, operating on some 520 feet of additional berthing, are constructed on most up-to-date lines, and are as nearly as possible rat-proof.

Moreover, the trade of the Port is not such as to encourage the prevalence of rats. This does not mean that no rats were dealt with, although Tables E and F (which are omitted) are "Nil Returns." Owners of quayside storehouses have called upon the services of the Department during the year, with good results, although no dead rats were recovered.

Tables G and H (omitted) are also under the circumstances "Nil Returns."

#### VI. *Hygiene of Crews' Spaces.*

**TABLE J.**  
**Classification of Nuisances.**

Nationality of Vessel.	Number inspected during 1933	Defects of original construction	Structural defects through wear and tear.	Dirt, vermin and other conditions prejudicial to health.
British ...	160	—	24	—
Other Nations	70	—	3	—



## VII. (1) *Food Inspection.*

There are no imports of foodstuffs, except the marketing of onions and some potatoes from France.

The Local Sanitary Authority's Analyst is available for examinations and reports, in addition to the local Public Health Laboratory service.

## (2) *Shellfish.*

The difficulty which had been met in recent years in maintaining a supply of oysters above reproach as edible shellfish was the result of the growth of the popularity of the District, and the presence close to the shores of the Bay and Harbour, of a population of some 200,000 inhabitants. The oyster is naturally a pure vegetarian; it has considerable defensive powers against contamination from external sources, and, if placed in favourable circumstances, will effectually cleanse itself of any doubtful taint. Hence the present position of the trade in Poole oysters, viz., that oysters dredged from the Harbour generally shall be relayed at an approved area—the relaying beds at Shipstal, in the Arne Reach of the Harbour—as a prior condition to their sale in open market.

Tests periodically carried out in the Borough Public Health Laboratories on samples of those which have been so relaid for a period of fourteen days, show them to have become by the process, a clean, marketable oyster capable of holding its own with the product of Whitstable and other reputed beds. The actual Laboratory tests carried out gave the results in accordance with expectation, and show the dependability of the re-laying process at the Shipstal beds. For example, a group of oysters submitted for test on 10th February, from the re-laying beds at Shipstal, gave an average number of lactose-fermenting organisms of 12, which indicates a good edible standard.

The close season extends from 15th May to 30th September, each year.

The following extracts from periodical reports of the Chief Fishery Officer of the Southern Sea Fisheries District Committee and of the Committee itself indicate the present condition of the Oyster industry as it affects Poole.

*Quarter ending 6th April, 1933.*

*"Oysters have been taken only in small quantities. The numbers taken from those grounds which formerly yielded thousands during each week of the season, are now counted in hundreds. There does not appear to be any sign of any impending improvement. In the eastern parts of the District the oyster grounds are becoming covered with slipper limpets, and there are some grounds which appear to be entirely depleted of oysters. The oysters that are taken from such grounds as are productive are sold for relaying purposes, and fair prices have been obtained."*

"Up to the present time five licences to dredge for oysters in Poole Harbour have been issued. The number of oysters that have been dredged from the harbour has not yet reached the limit of 25,000 which was sanctioned by the Committee at the Quarterly Meeting in October last"

Quarter ending 20th July, 1933

"The season has been a very poor one, and very little of last year's spat has been observed. The warm weather in June and July may, it is hoped, have a beneficial effect upon spatting during the present year. The grounds throughout the District are in very poor condition."

"The number of oysters dredged from the Harbour during the past season is 10,000."

Quarter ending 19th October, 1933.

"During the present season very little dredging for oysters has taken place. It is hoped that as the result of the fine weather during the summer, the spatting season will turn out to be a good one, but it will not be possible to ascertain for some time to come if that has been the case. The great mortality that occurred after the War, and which was noticed particularly in 1921, has depleted the oyster fisheries to such an extent, that it will be a very long time before the oyster grounds can recover their former condition."

\* \* \* \*

"The Chief Fishery Officer reported that on the 12th October, 1933, he made an examination of the oyster grounds in Poole Harbour and in the course of making 18 hauls (each of 5 minutes' duration) with two dredges used under motor power, only 22 oysters were taken. He stated that he found the grounds were in a very dirty condition and in some parts of the Harbour there were numerous slipper limpets and in other parts there were ascidia and "glot" weed; the last mentioned weed having grown extensively owing to the warm summer. It was however not possible to make a reliable examination because of the protection afforded by the "glot" weed when the dredges were worked over the oyster grounds."

"It was recommended that sanction be given to dredge during the current season 25,000 oysters from the fishery for the purpose of being deposited on the laying grounds comprised in the lease granted to the Poole Fishermen's Society Limited."



## PART III.

# MATERNITY & CHILD WELFARE

### ORGANISATION.

The Medical Officer of Health is also Medical Officer for Maternity and Child Welfare. He is assisted by Dr. G. Chesney, Deputy Medical Officer of Health, and six full-time Health Visitor-School Nurses, who work on the district allotted to each, visiting the newly-born and children up to five years of age, giving advice to mothers and expectant mothers, and referring them, when necessary, for medical advice either to a practitioner or to a Clinic or Centre.

Ante-natal and Post-natal Clinics are held at the Municipal Clinic, Market Street, Poole, on Mondays at 4 p.m. and on Thursdays at 11 a.m.; and at the Branksome Council Buildings on Tuesdays and Fridays at 2 p.m., where expectant mothers, nursing mothers and their children, who for one reason or another do not attend either a family doctor or the Voluntary Association Centres, can interview the Medical Officer. The Health Visitors assist.

These Clinics, in conjunction with the home-visiting by Health Visitors, form a focus of investigation and assistance which leads in suitable cases to:—

- (a) reference to a General Practitioner, the out-patient department of a Hospital, Dispensary, or a Voluntary Centre;
- (b) the issue of milk or dried milk—free or at reduced rate, either for mother or baby;
- (c) admission to the maternity ward of Cornelia Hospital for some ascertained or expected complication of pregnancy, or occasionally where normal confinement cannot, from lack of suitable accommodation, be safely carried out at home;
- (d) admission to the infants' ward at Cornelia Hospital in suitable cases of debility, wasting, etc.;
- (e) admission to the Isolation Hospital in suitable cases of Puerperal Sepsis or Pyrexia, Ophthalmia Neonatorum, Measles complicated by Bronchitis, etc.

The ante-natal side of this work is closely co-ordinated with the Obstetrical and Gynaecological Clinics of Cornelia Hospital, where also is the Hospital Ante-natal Clinic and the Maternity Ward.

Acting in close co-operation with the Health Department, the Borough of Poole Maternity and Child Welfare Association, formerly the Poole Mothers' Association—an old established body of voluntary workers—is a valuable asset in the advancement of health in the town. It is subsidised by the Borough Council, has the advantage of the services of six local practitioners, and



two dental surgeons, and the assistance of the Borough Health Visitors who, with a salaried Superintendent (C.M.B.) and many voluntary helpers, distribute their energies over five centres and Schools for Mothers, in the Poole, Longfleet, Newtown, Branksome, and Heatherlands districts.

Particulars of the facilities are posted up, by arrangement with the Postmaster General, in the local Post Offices, and also in other meeting places and Institutions.

### WORK DONE UNDER THE BOROUGH SCHEME.

The Medical Officer of Health and his staff have carried out the following work during the year.

(1) *Home Visiting*.—The Health Visitors, and the Medical Officer where considered necessary, have paid 365 visits of advice to expectant mothers, and 10,440 visits to infants and children under school age.

(2) *Ante-natal, Post-natal and Child Welfare Clinics*.—The Medical Officer or the Deputy Medical Officer personally attend all clinics. At these, advice, and, where advisable, treatment have been given to 321 expectant or nursing mothers, who made 2,105 visits to the Clinics; to mothers on behalf of their children in 680 individual cases, who made 5,540 clinic visits.

In the ante-natal care of mothers, examination of urine is made during the last three months. 56 such examinations were made in all.

Records of blood-pressure may also be kept, as an adjunct in anticipating possible complications.

There is established at Cornelia Hospital in co-operation, on Thursday afternoons, an ante-natal clinic, at which the expectant mothers who are waiting admission to the Maternity Ward under the Scheme meet, and are examined and kept under observation by the Obstetrician who will attend them during their stay in the ward.

The Hospital records show that of 138 expectant mothers attending the Hospital Ante-natal Clinic, 75 mothers belonging to Poole were referred from the Municipal Clinic and 18 by general practitioners. Those referred by the Medical Officer made 276 such attendances. Ultimately 75 of those referred under the Borough Scheme passed through the Maternity Ward.

With regard to attention to infants and children under school age, a general criticism is levelled at a Child Welfare service that nothing is done for the children between 2 and 5. It may be replied in argument that, when a young mother has gained some experience in the upbringing of a baby, with the assistance of Medical Officers, Health Visitors and Welfare Workers, there should not be so much call for her regular attendance later at clinics or centres merely to swell the total of attendances for statistical

purposes, by having the children weighed. If the Scheme has benefited her at all with her first baby, she should be better able to fend for herself, otherwise it has failed in its essential—education.

However that may be, it may be noted that of the total attendances at all clinics and centres of 11,967, 5,562 were by 340 children under 1 year, and 6,405 by 698 over 1 year, and that of the total visits paid to homes, viz., 11,313, 4,997 were on account of those under, and 6,316 for those over, one year of age.

(3) *Issues of Milk and Dried Milk.*—In certain cases and under close supervision, dried milk is sold at cost price for use of infants where for definite reasons the mother's milk is not available, or where seasonal conditions render ordinary cow's milk undesirable. This part of the Scheme is self-supporting, but no profit accrues.

Cow's milk at reduced rates, or free issues of cow's milk, are allowed, for medical reasons only—in most cases to the amount of one pint per individual per day—where the household income does not exceed a sliding scale approved of by the Ministry of Health. It has been granted, usually in four-weekly periods and renewable, in 246 cases, a decrease of 12 on 1932.

In some cases the issues commenced with those expecting to become mothers within three months, or with mothers nursing their infants whose breast milk showed signs of insufficiency.

In suitable cases the milk was continued for the direct benefit of the infant, where for an ascertained reason the mother's milk was not available or suitable, and in a selected few the issue was carried into the second year, where home conditions were handicapping the child.

(4) *Hospital Services for Maternity and its Complications.* Accommodation is provided at Cornelia General Hospital and at the Borough Isolation Hospital (for Puerperal cases).

In 1933, 75 cases were admitted, as compared with 76 in 1932, and 67 in 1931. 39 of the admissions were cases of emergency, of which three required the Caesarean operation. There were amongst these 39, one infantile death and 6 stillbirths. There were 34 live births in the 36 "accommodation" cases. Details are to be found below.

(5) *Hospital Treatment under Child Welfare Scheme.*—Seven infants have received attention as in-patients at Cornelia Hospital, and one under observation for ophthalmia neonatorum at the Borough Isolation Hospital. Details are to be found below.

# HOSPITAL ADMISSIONS.

## Maternity.

No.	Nature.	No. of Deliveries.		Deaths.				Abortions.
				Maternal.	Infantile.		Stillbirths.	
					M.	F.		
3	Severe Contracted Pelvis (Caesarean) ...	1	2	—	—	—	—	—
7	Contracted Pelvis ...	2	5	—	—	—	—	—
10	Slight Contracted Pelvis ...	6	4	—	—	1	—	—
1	Heart Disease (Caesarean) ...	—	1	—	—	—	—	—
3	Albuminuria ...	3	1	—	—	1	—	—
2	Eclampsia... ..	—	2	—	—	—	2	—
2	Antepartum Haemorrhage ...	1	1	—	1	—	—	—
2	Anaemia ...	—	2	—	—	—	—	—
2	Abnormal Presentation ...	1	1	—	—	1	—	—
4	Secondary Inertia ...	4	—	—	—	1	—	—
1	Prenature Labour ...	—	1	—	—	—	—	—
1	Placenta praevia (Caesarean) ...	1	—	—	—	—	—	—
1	Observation ...	1	—	—	—	—	—	—
36	Accommodation or primiparae ...	17	19	—	1	—	1	—
76		37	39	—	1	1	4	3
				—				—

# HOSPITAL ADMISSIONS—(contd.)

## Infants.

Provisional Diagnosis.	Discharged			Remaining in Hospital.	Died.	Total.
	In Good Health	Improved	No Im- provement			
Marasmus, Nutritional	1	4	—	—	1	6
... ..	—	—	—	1	—	1
Ophthalmia Neonatorum (observation)	—	1	—	—	—	1
Rachitis and Anaemia	1	5	—	1	1	8
...						



### OPHTHALMIA NEONATORUM.

This threatened blindness in the newly-born infant from a damaging infection of the eyes has not been found during the year in 970 live births. Two cases were notified, but not confirmed.

That the numbers should have dropped from the 21 cases of 1921 to 1, 1, 0 and 1 in the years 1929-32, is testimony to good work on the part of the practising midwife, good following up by Health Visitors, and, not least, better education in Hygiene on the part of the parents.

### MIDWIVES ACTS, 1902-1926.

On October 1st, 1930, the Council became the local Supervising Authority by transfer from the County Council.

There were at the end of 1933, 31 midwives on the practising Roll, distributed as follows :—

Living in and practising within the Borough	...	18
Living outside, and practising within the Borough		8
Living and practising in Institutions in the Borough		5
		<hr/>
		31
		<hr/>

In 1933 medical aid was summoned in 75 cases.

By co-operation with the Department, Dr. Gordon Luker, the Borough Consultant Obstetrician and Gynaecologist, kindly gave a short refresher course of four lectures with lantern demonstrations, open to all practising midwives. The large number attending marked the acceptability of the course.

### CHILDREN AND YOUNG PERSONS ACT, 1908-1932.

The duties of supervision of children boarded out with foster mothers were taken over on 1st April, 1930.

With the general supervision of the Medical Officer, each of the six Health Visitors is an authorised Inspector under the Act, and their work under this Act is closely associated with that carried out for the Maternity and Child Welfare Scheme generally, many of the foster mothers making regular attendance at either clinic or a voluntary Centre.

There were 62 foster children on the Register at the end of the year, in the care of 47 foster mothers. 484 visits were paid to these by the Inspectors.

### NURSING HOMES REGISTRATION ACT, 1927.

The work of supervision under this Act was transferred to the Borough, from the County Council, on April 1st, 1930.

There are 13 institutions on the Register, an increase of 1, one being exempt and 12 subject to supervision, of which latter 4 are classed also as Maternity Homes. These are in charge of qualified midwives subject to supervision under the Midwives Acts.

### PREVENTION OF MATERNAL MORTALITY AND MORBIDITY.

There was one death associated with maternity during the year, the cause being given as post partum haemorrhage after breech delivery. There was no death from puerperal sepsis.

The Maternity Scheme of the Borough includes what may be described primarily as "Maternity Hospital," as distinct from "Maternity Home," provision. That is to say, it provides for physical danger rather than for convenience. In the former respect, based on past averages, about 51 abnormal cases (5 per cent.) may be expected annually. A certain further proportion (1.5 per cent.) is allowed for other exceptional conditions, making maternity at home inadvisable, with an additional allowance for suitable primiparae.

Should an apparently normal case which has made private arrangement with the Hospital—as a Maternity Home—for admission, subsequently be found to be abnormal, it may be possible for the Hospital, by co-operation with the Medical Officer of Health, who will consider each case on its merits, to make arrangements by which, if the ordinary period in hospital be unduly prolonged, the Hospital might be safeguarded against excessive financial loss on that account.

At present, practising midwives are not in a position to bring to the notice of the Hospital Obstetrician at its Ante-natal Clinic, booked cases in which they have some warning of possible abnormality, except, as stipulated by the Hospital authority, through the medium of a practitioner. Negotiations are at present in progress by which a *per capita* rate would be paid under the Scheme to the Hospital for a first ante-natal examination and report on every primipara referred by a midwife, the midwife being subsequently compensated by scale if a case for which she had been engaged becomes an intern case for medical reasons associated with pending childbirth.

### PREVENTION OF NEO-NATAL MORTALITY.

Deaths under 1 year of age can be usefully divided into two groups—those under four weeks (the neo-natal deaths), and the rest.

For the past fifteen years, the following table summarises the position with regard to the former group.

Year.	Neo-Natal Deaths attributed to					Annual Rate per 1,000 live births	Rate per five- year per- iod.	Annual Infant Death Rate per 1,000 live births	Rate per five year per- iod.
	Antenatal Causes.		Postnatal Causes.		Total				
	No.	Per Cent.	No.	Per Cent.					
1919	23	82	5	18	28	36.4	39.2	62.0	70.1
1920	35	83	7	17	42	42.0		75.0	
1921	41	89	5	11	46	48.4		73.6	
1922	27	82	6	18	33	38.2		79.7	
1923	23	88	3	12	26	30.8		60.0	
1924	27	82	6	18	33	43.0	33.5	66.3	60.0
1925	22	81	5	19	27	30.3		71.7	
1926	24	92	2	8	26	30.2		53.4	
1927	30	97	1	3	31	33.5		58.1	
1928	26	93	2	7	28	30.6		50.2	
1929	20	71	8	29	28	30.9	29.0	46.3	49.7
1930	32	97	1	3	33	35.1		57.6	
1931	14	87.5	2	12.5	16	17.7		43.2	
1932	24	92	2	8	26	29.3		55.2	
1933	29	94	2	6	31	32.0		46.4	
		87%		13%					

The main points which may be gathered from this table are :—

- (1) that ante-natal causes have accounted in these years for about 87% of all neo-natal deaths, not to mention some similarly accountable deaths amongst those who managed to survive over 4 weeks ;
- (2) that deaths from preventible post-natal causes have been reduced in greater proportion than those handicapped by ante-natal causes ;
- (3) that only twice in the last eight years has the percentage of deaths from post-natal causes reached double figures. In 1929, broncho-pneumonia carried off 12 infants under 1 year, and in 1931, whooping cough and pneumonia took toll of 13. These were reflected in the neo-natal period ;
- (4) that while the annual rates of neo-natal deaths fluctuate considerably because of the relatively small numbers of all infants dealt with, the more stable five-yearly period



rate shows a reduction of 10 per 1,000 live births, while the infant death rate as a whole has come down by 20 per 1,000 live births in the same period ;

- (5) that these five-yearly rates show a steadier reduction for all infants, whereas the speed of reduction of neo-natal loss is somewhat slower in the second half of the period, this in spite of the introduction of the additional Hospital Ante-natal Clinic in 1928, and the greater use of the Maternity Ward for cases expecting difficulty.

The fact remains that the Ante-natal Clinic is not being made use of early enough either in the number or in the stage of pregnancy. The expectant primipara has still to be educated to the idea of the early examination, and the practising midwife needs to be more encouraged to send her.

### VOLUNTARY WORK.

*The Borough of Poole Maternity and Child Welfare Association.* The workers of this association, which is subsidised by the Borough and is under the guidance of the Medical Officer and the Health Visitors, continue to give most valuable support to the aims of the Municipal Scheme. It is now in the 26th year of its activities, and is one of the pioneers of this work in the country.

The activities of the Association include a Maternity Provident Club, Savings Bank, Dental Club, Sale of Children's Garments, and loan of Sick Room requisites, bed linen, packs, etc.

*Hants and Dorset Babies' Home and Nursery Training School.* Reference has already been made to this Institution in the Public Health Section of the Report. It has a capacity of 23 cots, and 23 infants were admitted during the year. Of these, 6 were the children of mothers belonging to the Borough.

*Red Cross Children's War Memorial Hospital, Swanage.* Seven young children belonging to Poole had the benefit of this Hospital, for periods ranging from 3 to 7 weeks.

### IMMUNISATION AGAINST DIPHTHERIA.

This Public Health preventive service operates amongst the infants and children under school age, as it does for the older elements in the population.

The ultimate aim is to secure that about 35 per cent. of the infants of the Borough are protected against the invasion of this treacherous and death-dealing disease when they reach the age of one year. Up to the present, this immunising work has been carried on chiefly amongst the children of school age, a total of about 2,000 in all having been dealt with since November, 1929, and over 300 in 1933.

By gradually getting this age group younger and younger until the whole are found in the "one year olds," we will be also



approaching the position in which we should be reasonably able to say that we have saved ourselves for the future from the risk of epidemic of one of those banes of early childhood against which we are all now redoubling our energies, *viz.*, Diphtheria, Whooping Cough, and Measles.

As a step in this direction, 83 of those protected during the year were under 5 years of age, and it is hoped that the following letter which is now sent to the parent of every child when that child reaches one year will have the desired effect.

Your baby is now a year old. As soon as it is able to run about, it will begin to mix more with children outside your own household, and there will be a greater risk of it catching some infectious illness.

Measles and Whooping Cough are the two most serious death-dealing diseases of infancy. In the past five years in this country, these two illnesses alone carried off 11,000 infants and over 21,000 "toddlers." When you know that these two illnesses are round about you, treat the matter as serious. The old idea that every child has to have Measles is long out-of-date. It has even led to mothers putting all their children together, so that they would all get it over at once. There have been hundreds of people who could date their Tuberculosis from the cough that came with Measles, because Measles was considered an illness of little importance.

It has not yet been found practicable to "protect" all children against Measles or Whooping Cough, so that these could be disregarded when they come your way. It is, however, practicable to do this with *Diphtheria*. Recently, over 12,000 little children between 1 year and 10 years old have died from this disease, which is far more treacherous than the others, because there is no warning sign until the child is dangerously or fatally ill.

In Poole already nearly 2,000 children have been "protected" against Diphtheria, and I appeal to you to give your baby the same safeguard. The best time to do this is just when it has reached its first birthday. That is why I send you this letter.

If you do not know of any children who have already been made "immune" to Diphtheria, and who can tell you what it means, let your wife come and see for herself what other mothers are doing. There may be a sad tale to tell by waiting till Diphtheria comes along your way. It may be too late.

Your Town is providing the Clinics now, and free to all. They are at 67, Market Street, Poole, on Wednesday mornings at 10.30, and at the Council Buildings, Shillito Road, Branksome, on Wednesday afternoons at 2.

### INFANTILE MORTALITY.

Reference to Table A of the Public Health Section of this Report will show that 1931 gave the lowest death rate amongst infants, being 43.2 per 1,000 live births.

In 1933, the total number of infants dying under one year of age was 45, in 970 live births, giving a mortality rate of 46.4 per 1,000 born. For a partly industrial centre, this may be considered a satisfactory figure, the rate for England and Wales as a whole being 64, and for the larger towns of the country, among which Poole is classed, 67.

Examination of the cause of death (see Table C) as certified by the medical attendant in each case, shows that 34 of the 45 were directly or indirectly due to some ante-natal cause affecting the mother, which prevented the child from entering the world with a fair chance to survive. In the previous year there were 33 such out of 49.

There were also 48 stillbirths not included in the above figures, and these have to be added to the toll of infant life sacrificed to abnormal ante-natal maternal conditions, so that altogether 93 potential lives were lost on this account, as compared with 82 in 1932.

31, or 69 per cent. of the infants who died did not survive one month, and are described as neo-natal deaths. 29 of this 31 died from ante-natal causes. Of this 31, 21 were under one week at the time of death.

An endeavour has been made to obtain some information regarding causal factors in the 48 stillbirths reported, a "confidential" letter being sent to the signatory to the notification, as follows:—

"Under recent Regulations, I am expected in cases of stillbirth to make any enquiries which might be of educational use in the interest of the saving of infant life.

I would therefore consider it a favour if you could give me any information as to possible antecedent or concurrent causes which might be associated with the stillbirth occurring in the case of Mrs.....  
of....., on....."

The replies, summarised of necessity very briefly, are given below, and appear to hold out a special plea for further early ante-natal attention.

1. Hospital case. No reply to enquiry.
2. Big child; flat pelvis; 4 days' labour; forceps.
3. Arm presenting; dead some days.
4. Hospital case; no reply to enquiry.
5. "Breech and large head."
6. "Anencephalic breech." Maternity home case.
7. Anencephaly and hydramnios. 3 previous children normal.
8. Premature. Breech presentation.
9. Breech; suffocated in utero; primipara.
10. Eclampsia; hospital case.
11. Hydramnios; cord separated at delivery by force of expulsion.
12. Hospital case; no reply to enquiry.
13. Breech delivery at  $7\frac{1}{4}$  months, not fully developed. One previous breech delivery, child well.
14. Hospital case. No reply to enquiry.
15. Breech. Primipara. Version reverted; probably injury to tentorium.

16. Elderly primipara ; dry labour. Death from compression ?
17. Anencephalic.
18. Marked hydrocephalus. Macerated.
19. No ascertainable reason.
20. No ascertainable reason.
21. Premature monster.
22. Early separation of placenta. Cord round neck.
23. Dead in utero. Abortion one year previously. Luetic ?  
7-para.
24. " Fright " from dog night before birth. Precipitate labour.
25. Cord 3 times round a leg. " Dry " labour.
26. 7 months. Macerated. Primipara. Working up to last  
fortnight.
27. Breech. Weak labour.
28. Hospital case ; no reply to enquiry.
29. Placenta praevia.
30. Pyelitis of pregnancy ; macerated foetus.
31. Complicated breech presentation.
32. Breech ; " white asphyxia " ; cord 4 times round neck.
33. Eclampsia ; foetus 3 days dead. Hospital case.
34. Accidental concealed haemorrhage. Hospital case.
35. 12-para. Macerated ; dead 2 months. Last child lived only  
1 day. Hospital case.
36. Contracted pelvis. Breech, partly extended arms and legs.  
Hospital Case.
37. P-O-P. Instrumental.
38. No reply to enquiry. *Locum tenens* case.
39. Easy breech. No ascertainable cause.
40. Large baby. Breech with extended arms.
41. 5-para. B.B.A. Doctor had visited previous day for in-  
somnia.
42. Breech, with extended arms.
43. Elbow presentation ; prolapsed cord. Caesarean operation.  
Macerated foetus. Hospital case.
44. Six months' premature breech, precipitated by influenza.
45. Brow presentation. 10 days overdue. Primipara. Hospital  
case.
46. Cord, arm and leg prolapsed. Primipara. Hospital case.
47. Concurrent ill-health. Hydramnios. Twin. Male survived.  
Maternity home case.
48. Hyperemesis gravidarum. Induction unsuccessful. Maternity  
Home case.

It would be futile to suggest that any form of organised Health activities could hope to wipe out this wastage. There are too many factors at work, human nature included. But what we can hope for is that the development of accessible Centres for ante-natal advice, and of maternity facilities freed from the

anxieties of awkward home conditions, with advisers whose personality and experience can spread mutual and general confidence, will result that the girl of to-day, who has grown to girlhood with a more active appreciation of the laws of Health and Hygiene, may in her motherhood be spared many of the avoidable mischances of the past.

#### **DEATHS OF CHILDREN FROM 1—5 YEARS.**

I repeat below a comparative table which shows from year to year the proportion of deaths of infants under 1 year and of children under school age. It will be seen that the reduction in loss of infant life, as indicated by the gradual fall in the percentage of infant deaths compared with the total deaths, is not, as some critics would assert, merely a postponement of death into the second year of life. The reduction on the percentage loss of "toddlers" over the period reviewed is greater than that achieved for infants, which goes to show that to whatever causes the improvement in the infant's chance of life is due, these are sufficiently sound to gain enhanced effect as the child grows older. It is not too bold a claim to assert that Maternity and Child Welfare Work is one of these causes.



Year	Popula- tion.	Births	Deaths under 1 year	Per cent. of Total Deaths	Deaths 1—5 years	Mean Deaths 1—5 by four- yearly groups.	Per cent. of Total Deaths	Deaths over 5	Per cent. of Total Deaths	Total Deaths
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1907	32518	895	68	16.3				316	75.8	417
1908	33217	880	87	19.4	43			318	71.0	448
1909	33524	933	83	17.8	40			343	73.8	468
1910	34168	884	73	16.8	43			318	73.3	434
1911	39102	936	118	21.6	45	42.75	9.0	384	70.2	547
1912	40386	918	81	17.7	28	39.00	8.2	348	76.1	457
1913	41066	910	75	16.6	23	34.75	7.4	354	78.3	452
1914	41889	883	68	14.1	38	33.50	6.9	375	77.9	481
1915	42800	812	76	14.6	38	31.75	6.6	406	78.1	520
1916	42331	840	64	12.0	43	35.50	7.1	428	80.0	535
1917	42335	690	58	11.0	40	39.75	7.7	432	81.5	530
1918	43829	680	55	9.4	26	39.25	7.2	491	84.4	582
1919	41100	769	48	9.1	21	35.00	6.4	458	87.0	527
1920	43400	1024	77	16.4	13	27.50	5.2	381	80.9	471
1921	43649	951	70	13.4	9	19.75	3.8	442	84.8	521
1922	43250	865	69	11.1	32	18.75	3.5	522	84.1	623
1923	43860	845	51	9.8	18	18.00	3.4	454	86.8	523
1924	45150	814	54	10.3	21	20.00	3.9	450	85.7	525
1925	46150	837	60	11.1	20	22.75	4.2	462	85.2	542
1926	49150	861	46	8.3	11	17.50	3.2	496	88.7	553
1927	51030	895	52	8.3	19	15.25	2.4	567	90.3	628
1928	52940	916	46	7.4	22	15.50	2.5	553	89.1	621
1929	53870	965	42	5.9	27	17.25	2.4	640	90.5	709
1930	56150	939	54	7.9	19	19.25	2.8	623	89.5	696
1931	56780	962	39	5.5	23	22.75	3.2	647	91.3	709
1932	58230	887	49	7.2	21	22.50	2.1	612	89.7	682
1933	63510	1018	45	6.0	12	18.75	1.6	687	92.3	744

# PART IV

## SCHOOL MEDICAL SERVICE

### I. STAFF AND SCHOOLS.

School Medical Officer		R. J. MAULE HORNE, M.A. (Hons.), M.B., CH.B., B.Sc., D.P.H.
Asst. School Medical Officer		G. CHESNEY, M.B., B.Ch., B.A.O., D.P.H.
Ophthalmic Surgeon		ALEX STABLES, M.B., C.M.
Ear, Nose and Throat ...	...	C. SALKELD, B.A. (Lond.), M.B., B.S. (Durham).
Radiologist ...	...	D. D. MALPAS, M.R.C.S., L.R.C.P.
Anaesthetist ...	...	J. C. A. NORMAN, M.R.C.S., L.R.C.P.
Dental Surgeons	...	L. B. MYERS, M.B.E., L.D.S. R. G. S. HOLMES, L.D.S.
School Nurses and Health Visitors	...	MISS A. L. HOOPER. MISS L. B. LEVER. MISS F. E. MORGAN (appointed December, 1933) MISS C. C. MOUNT BATTEN. MRS. H. I. PARTRIDGE. MISS B. A. SYDENHAM.
Chief Clerk ...	...	*F. B. EDWARDS.
Clerk ...	...	*MISS K. D. CODD.

\* Whole-time Officers.

The Officers of the School Medical Service are part-time, with the exception of the clerical staff.

The only alteration in the personnel during the year was the appointment of an additional part-time School Nurse.

As a result of the extension of the Borough under the Dorsetshire Review Order, 1933, the Broadstone Council and Canford Magna Schools came under the authority of the local Education Committee on the 1st April, 1933. There were 203 children on the register of the Broadstone School, and 70 on the Canford Village School register.

There are now in the Borough 15 Public Elementary Schools under the control of the Local Education Authority with a total of 27 departments and accommodation for 7,505 children. For the year 1933 the number of names on the register was 7,157 and the average attendance was 6,517.

Of the 15 Public Elementary Schools, 9 are Council schools, with 15 departments and accommodation for 4,899 children, and 6 are non-provided schools, with 12 departments and accommodation for 2,606 children.

The Russell-Cotes Nautical School, an elementary school

under the control of the Local Education Committee, with accommodation for 70 boys, is situated within the Borough, but being a special school having its own Medical Officer, it does not appear in the figures relating to the School Medical Service proper.

There are in addition 19 private schools, and a survey regarding their accommodation, average number of scholars, age groups, and hygienic conditions has been carried out.

In Table V is given the list of schools under the Local Education Authority, with recognised accommodation and statistics of attendance.

## II. CO-ORDINATION.

The fact that the School Medical Officer is at the same time Medical Officer of Health, in charge of the Borough's Maternity and Child Welfare Scheme, and Medical Superintendent of the Borough Isolation Hospitals, admits a unification of control, a continuity of effort, and a possibility of "following-up," which becomes more difficult of achievement in a community of larger numbers.

In previous reports, a detailed statement regarding the co-ordination of the work of the School Medical Service with that of the other health services of the Borough has been given. No substantial alteration of the existing arrangements has been made during the year under review.

For the convenience of children and parents residing in the Parkstone and Branksome areas, a diphtheria immunization session is now held by the Public Health Authority on Wednesday afternoons at 2 at the Branksome Minor Ailment Clinic, in addition to the session at the Poole Minor Ailment Clinic at 10.30 a.m.

## III. SCHOOL HYGIENE.

No systematic survey of the hygienic conditions of the schools was carried out during the year, but those schools where general conditions are unsatisfactory were kept under observation, and specific defects were rectified where practicable. The hygienic and structural conditions of St. James', St. Peter's, and National Schools are very unsatisfactory, though at the latter school some temporising improvement has been effected.

There are at present under consideration proposals for the building of three new schools, and it is hoped that when this additional accommodation is provided the way will open up to the closure of those school buildings which by reason of structural antiquity, unsuitable location and chronic disrepair are not serving the interests of the health of the scholars. The proposed new schools are—a senior school on the Wimborne Road, with two departments providing for 440 boys and 440 girls, aged 11 to 14 years (this school will serve the needs of the old Poole area, and obviate overcrowding at Hamworthy and Oakdale)—a senior school in the



Rossmore area, with two departments accommodating about 440 boys and 440 girls, serving the requirements of this rapidly growing area, and relieving congestion at Branksome Heath and Heatherlands—and a junior school on the Haskells estate with accommodation for about 320 infants.

#### IV. MEDICAL INSPECTION.

The routine medical inspection of the three age groups (Entrants, Intermediates and Leavers) is carried out at the schools, except in a few instances where suitable arrangements cannot be made without interfering with the school routine. The provision of a room suitable for medical inspection is being considered in any projected plans for new school buildings.

During the year 706 entrants, 428 Intermediates (children of the age of 8 years), and 787 Leavers (children of the age of 12) were examined—a total of 1,921, as compared with 2,278 in 1932. In addition 429 children were re-inspected at school as “specials.”

#### V. FINDINGS OF MEDICAL INSPECTIONS.

A detailed list of defects found as a result of routine medical inspection is given in Table IIA, and in Table IIB is recorded the percentage of children in each code group requiring treatment for defects other than uncleanness and dental disease.

*Uncleanliness.* In two important categories, the findings of routine medical inspection cannot be regarded as a true indication of the childrens' actual everyday condition. The majority of the mothers make an effort to present the children to the examining doctor looking their best as regards clothing and cleanliness. In 1933, of the 1921 children inspected only 6 are recorded as unsatisfactory in clothing and 3 were found to have defective footwear. Observations at the minor ailment clinics and at unexpected visits to the poorer schools suggest that these low figures do not reflect the actual state in respect of clothing and footwear, though it is not suggested that there is any marked deficiency. With regard to uncleanness, two children were found to have head lice, and 111 had one or more nits of the head louse, while 30 children had petechiæ obviously caused by the bites of fleas. Only a few of the 111 children found to have nits were markedly infested, the majority of the heads indicating by odour that the mother had been endeavouring to rectify the condition before presenting the child for inspection. There are a number of children who are chronic offenders, and whose parents do not willingly co-operate in the endeavour to improve the cleanliness level of the schools. These children are allowed to relapse into a state of head infestation after having been cleansed, and the customary fines imposed do not appear to influence the parents.

During the year legal proceedings were taken in 14 cases, fines being imposed in 7 cases.



*Nutrition.*—In 1932, of 2,278 children examined, 59 were noted as being nutritionally subnormal, and 13 were definitely malnourished. In 1933, out of 1,921 children inspected, 112 were recorded as of subnormal nutrition, and 26 showed a decided degree of malnutrition.

It is however undesirable to draw any definite conclusions from this apparent increase in malnutrition, as in the absence of a scientifically exact and easily applied basis of assessment the findings are liable to vary with the opinion and mode of assessment of the examining medical officer.

*Teeth.* The figures given below are the results of the School Medical Officer's inspection, not of the Dental Specialists, and are given to show the general trend of the results.

Percentages with	1929	1930	1931	1932	1933
All teeth sound ... ..	53.7	49.7	43.6	46.7	41.5
1—3 Defective ... ..	29.9	29.0	34.7	36.2	35.9
4 or more Defective ...	16.4	21.3	21.7	17.1	22.6

The round 20 per cent. at the bottom of the scale are to a great extent "irreconcilables," who are likely to remain in spite of advice and teaching.

Apart from these irreconcilable objectors, inspection shows that even by the age of five years the temporary teeth have been the victims of injudicious training and diet to such an extent as seriously to interfere with successful effort on the part of the Dentists to preserve them.

Education of the parent in the sphere of child welfare has not up to the present penetrated sufficiently with regard to suitable diet for and care of the milk teeth.

It is disappointing to note that the percentage of children with all teeth sound has fallen during the past five years. This may be a result of the economic depression which has existed since 1929, and suggests that the vitamin and calcium content of the childrens' diet has suffered by the necessity for household economy. An increase in rickets observed at the Child Welfare Clinics during the past few years supports the opinion that in many instances the father's unemployment or reduced income has meant a reduction in those foods essential for the proper development of teeth and bone.

It is, however, gratifying to find that whereas in the entrants group only 31% have all teeth sound with 30.8% showing 4 or more carious, in the leavers group, 55% have a sound set of set teeth, and only 6.5% showed 4 or more carious.

The following figures for the year show both the high ratio of

decay in the young children and the desirable results of the Dental Scheme in the older scholars.

	Entrants	Intermediates	Leavers	Total
Examined ...	706	428	787	1921
Teeth sound ...	31.0%	33.9%	55.0%	41.5%
1—3 decayed ...	32.2%	38.1%	38.1%	35.9%
4 or more decayed ...	36.8%	28.0%	6.9%	22.6%

*Vaccination.* In accordance with recent instructions on vaccination issued by the Ministry of Health, one or more marks are now accepted as evidence of effective vaccination. In 1933 :—  
of 706 children under 8 examined, 20.2 per cent. were found to be vaccinated ; ,  
of 428 children of 8, 22.2 per cent. were found vaccinated ;  
of 787 children of 12, 16.4 per cent. per found vaccinated.

## VI. FOLLOWING-UP.

At the School Medical Inspection, the parents of children found with minor defects are given verbal instructions regarding the necessary treatment, and in suitable cases the children are referred to the Minor Ailment Clinics. More serious defects are followed up by a formal printed notice to the parents. Dental cases are referred to the Dental Clinic. Cases of unhealthy or enlarged tonsils and adenoids are admitted to the Cornelia Hospital for operation under the School Medical Scheme. Arrangements are being completed for an Orthopaedic Clinic at Cornelia Hospital to deal with crippling defects.

Defective children are re-inspected by the Medical Officer at the school as "specials," and the notice to parents regarding treatment is sent a second time if no steps are found to have been taken to deal with the defect.

At the routine medical inspections in 1932, 429 "specials" were noted for re-inspection in 1933. In 168, the defective condition previously found has been rectified, in 141 the condition was definitely improved, and in the remaining 120 no change was observed.

Unaccountable absences from school are followed up by the School Attendance Officers, and many of these absentees are subsequently referred to the clinics.

The School Nurses paid 309 "rapid inspection" visits to the schools, covering in these inspections 36,203 children, and passing on to the appropriate clinic for necessary advice or treatment 810 of the children.

## VII. MEDICAL TREATMENT.

The Minor Ailment Clinics at Poole and Branksome are open from 9 to 10 a.m. each school day. Children are referred to these clinics from the school medical inspections, from the schools by the School Nurses or Head Teachers, by the Attendance Officers, or are brought by their parents. Minor ailments are attended to by the Medical Officer and the Nurses, and special defects are referred to the appropriate clinic or to the hospital, while general medical or surgical conditions are referred as a rule, to the family doctors, and in certain special cases to the hospitals.

During the year, 2,465 cases were seen by the Medical Officer at the Minor Ailment Clinics. In addition there were 3,891 subsequent re-inspections of these children, with necessary treatment. The total number of individual children who attended was 2,335, and the total number of attendances was 10,038. Some children attended on several occasions presenting varying minor ailments.

*Uncleanliness.* Out of a total of 359 children found at the schools to be unclean on account of infestation by the head louse or its eggs, (of whom 76 had to be excluded from school,) 173 were seen and the parents advised at the Minor Ailment Clinics.

Sacker combs are kept at the Clinics, and are lent out when necessary. Repeated instructions have been given to the parents regarding the methods of dealing with this uncleanly condition.

*Minor ailments and diseases of the skin.* Ringworm of the scalp was detected in 11 children, of whom 5 were treated by X-ray depilation. Ringworm of the body was found in 12 cases.

26 cases of scabies were seen during the year, compared with 24 in 1932. In several instances two or three children in one family were found to be infected, and some parents showed great carelessness and lack of interest in the effort to rid their children of this disagreeable infection.

There was a decrease in the cases of impetigo, 16 being found, compared with 28 in 1932. Other skin diseases dealt with during the year numbered 123, and 15 cases were kept under observation.

*Visual defects and external eye disease.* The number of children referred for the first time to the Refraction Clinic at Cornelia Hospital was 189. Of these 109 actually attended. A further 175 children who had in previous years been provided with glasses were notified to attend for a re-test, and 81 actually attended for re-examination of their sight.

Of the above, spectacles were prescribed for 129, of whom 100 took advantage of the Borough Scheme to obtain glasses or new glasses—a proportion of 77.5%, compared with 92.6% in 1932. Several other children are known to have had glasses provided from other sources.



After the provision of spectacles, parents are advised to bring the child to the School Clinic so that the fit and suitability of the glasses may be confirmed.

Minor eye defects were treated in 84 cases, and 7 cases were kept under observation.

*Nose and Throat Defects.* Defects of the nose and throat were dealt with in 359 children. In 192 of these operative treatment for unhealthy or obstructive tonsils and adenoids was carried out, 129 cases being dealt with at the Cornelia Hospital, under the School Medical Service Scheme, and 63 cases by private arrangements.

A more conservative attitude towards operative interference has been adopted, but the number of cases found to require operative treatment to cure or prevent affections of the upper respiratory passages has not diminished.

*Ear Disease and Defective Hearing.* Defects of the ear and hearing were treated in 57 cases. Cases of chronic otorrhoea were referred to the Aural Surgeon at Cornelia Hospital, and where indicated tonsils and adenoids were removed with a view to clearing up the condition.

*Dental Defects.* 371 children voluntarily attended the Minor Ailments Clinic for dental treatment. This is continued testimony to the popularity of the Clinic for a usually distasteful proceeding.

The Dental Surgeons inspected at the Schools, 6,615 children, of whom 3,379 were ascertained to require treatment. Altogether 1,746 actually attended and received treatment, approximately 52 per cent. of the whole. The percentage for 1932 was 54.

There is not included in these figures a proportion of children whose parents, on the information and advice gained by the inspections, obtained dental treatment otherwise than through the School Dental Clinic.

Analysis of the ages of children inspected by the Dental Officers and the proportion requiring treatment, is given below.

Ages	5	6	7	8	9	10	11	12	13	14	Total
Inspected	545	751	711	736	769	785	773	770	690	85	6615
Referred for treatment	292	429	431	395	415	436	442	453	432	54	3379
Percentage requiring treatment	53.6	57.1	65.5	53.5	54.1	55.5	57.2	58.8	62.7	63.0	56.8
Percentage in 1932	55.4	61.0	61.7	62.5	63.1	62.3	54.3	60.5	67.0	64.1	60.7



Mr. Myers, the Senior Dental Surgeon, reports as follows :—

School Dental Clinic,  
Poole.

3/2/34.

I have great pleasure in reporting upon the working of the School Dental Clinic for the year 1933.

This year Broadstone and Canford Magna Schools were added to our lists. We inspected 6,615 children in the Borough, an increase of 520. It is very encouraging to find that the number of children with good mouth conditions has increased by 443. On the other hand, I regret that the number of attendances decreased by 252, although more work was done in the year.

The best feature was the increase in the number of teeth stopped, *i.e.* 90, which is very satisfactory, as in these cases we have difficulty with the parents, who object to the treatment and insist upon having the teeth extracted or left alone.

In the main I think we are educating the parents to their responsibilities with regard to children's future welfare. As you will see by the figures, there was an increase in the number of hours given to treatment that is, of course, accounted for by the increase in the number of fillings.

Yours faithfully,

(Signed) LANCE B. MYERS,

M.B.E., L.D.S., R.C.S., ENG.

*Orthopaedic and Postural Defects.* 13 cases of orthopaedic defect were seen at the minor ailment clinics, of whom 5 were referred for treatment at the Orthopaedic Department of the Cornelia Hospital, and 8 were kept under observation at the minor ailment clinics.

A comprehensive orthopaedic treatment scheme has been prepared in consultation with the Orthopaedic Surgeon, Cornelia Hospital, and should be in operation during 1934.

*Heart Disease and Rheumatism.* Two cases of organic heart disease, two of functional derangement and two of anaemia were seen at the clinics. There were also 17 cases exhibiting rheumatic symptoms. They were referred to hospital or to the family practitioner for treatment.

*Tuberculosis.* The Dorset County Council is the authority responsible for the treatment of all forms of tuberculosis, and actual or suspected cases are referred to the County Dispensary, King Street. Five cases of suspected pulmonary tuberculosis and 2 cases of tuberculous cervical adenitis were seen at the clinics and referred for treatment, and 6 quiescent cases were kept under observation.

The opinion of the Tuberculosis Officer is obtained before allowing the attendance at school of a tuberculous child.

*Other Diseases and Defects.* 779 cases of sores, bruises, chilblains, and minor injuries were treated during the year at the Minor Ailment Clinics. 54 children were found to be suffering from an infectious disease, and were referred to the family doctor, and 56 cases of feverish cold presented themselves and were referred elsewhere for treatment.

### VIII. INFECTIOUS DISEASES.

There were no epidemic outbreaks of infectious disease during the year, and no Low Attendance Certificates were issued.

The incidence of scarlet fever was low, there being only 27 cases of children of school age, of whom 16 were attending public elementary schools, 5 at private schools, and 6 in temporary residence.

Diphtheria has shown a further fall during the year, only 8 cases occurring in elementary school children, of whom 5 were faucial cases, 2 nasal, and 1 laryngeal.

The incidence of this disease has fallen from the epidemic figure of 4.25 per 1,000 in 1929 to the low level of 0.19 per 1,000 in 1933.

The Diphtheria Immunisation Clinic commenced in October, 1929, has been continued during the year. A record of its work as affecting school children is given under section XVIII of this report.

408 visits were made to the homes of school children in connection with the occurrence of infectious diseases and the "following up" of the contacts.

### IX. OPEN-AIR EDUCATION.

There are no open-air schools in the Borough, but in the recent additions and alterations to existing schools the aim has been to approach as nearly as practicable the open-air type of school building. In some schools, during favourable weather, classes are held in the playgrounds. An excellent form of open-air education, beneficial to the health of the children engaged, and stimulating interest in history study, has been carried on for some time at the South Road Boys' School.

During the period September, 1926, to July, 1933, parties of senior scholars working under the supervision of the Headmaster Mr. H. P. Smith, B.A., F.C.P., have been engaged at intervals on excavation work on an Early Iron Age and Romano-British site at Hamworthy. The work has taken place mainly on Saturday mornings and the light evenings of the summer months. During the period July, 1931, to July, 1932, permission was granted by the Board of Education for parties of boys to carry out regular work on Thursday afternoons.

The results of these excavations, written and illustrated by the boys themselves, were recently published serially in the "Teachers' World," May-August, 1933.

## X. PHYSICAL TRAINING

There is no organiser of Physical Culture under the local Education Committee, but many of the teachers have had special instruction in this branch of education, and in the curriculum of all the schools time is set apart for exercises, and physical training,

Organised games are played in most of the Schools, and Football, Netball, and Cricket are popular.

It is being clearly recognised that a good posture and correct carriage cannot be attained in growing children unless they are trained and taught how to attain these.

## XI. PROVISION OF MEALS.

During the year, with the approval of the Education Committee, several schools continued the self-supporting scheme instituted the previous year for the supply of milk to the children midway through the school morning session, each child paying the cost of the milk supplied.

A temporary scheme commenced in January, 1933, for the provision of meals to suitable school children, was instituted by the Local Education Authority in co-operation with a local voluntary organisation. Originating in an effort to help the children of unemployed parents, this scheme, so far as the Education Committee is concerned, provided at seven centres midday meals for approximately 450 children, its scope being restricted to necessitous mal-nourished scholars.

## XII. CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.

*Co-operation of Parents.* The parents of all children are requested to attend at the routine medical inspections, so that in case of abnormal conditions an accurate history of the defect can be ascertained and suitable advice given.

The interest taken by parents in this work for the maintenance of the health of childhood is increasing, as shown by the following table, which indicates a steady increase in the number of parents attending the routine inspections, especially the first examination.

PERCENTAGE OF ATTENDANCE OF PARENT OR GUARDIAN.

	1928	1929	1930	1931	1932	1933
Entrants ...	62.4	67.2	67.4	67.3	70.5	76.6
Intermediates	43.8	44.8	51.2	50.7	53.9	59.8
Leavers ...	16.0	22.5	22.6	27.1	29.5	32.7



A large number of parents accompany the children referred to the Minor Ailment Clinic, and in the majority of cases show keen interest in the welfare of their children and in the efforts of the School Medical Staff to attain and maintain a high standard of fitness in the children under their care.

*Co-operation of Teachers.* There is close co-operation between the School Medical Service and the teachers. The lists of children for routine medical inspection are submitted by the teachers, and children presenting evidence of special defect are reported by them to the Department, or referred to the School Clinic for inspection. Reports on cases of suspected mental deficiency are submitted for the attention of the Medical Officer, and on all matters relating to the health and cleanliness of the children the assistance of the teachers can be relied upon.

*Co-operation of School Attendance Officers.* The Attendance Officers work in close touch with the Medical Service. Consultations regarding individual children are frequent and all exclusions from school are reported daily by the Department to the Attendance Officers, who in turn report to the Medical Officer or School Nurses cases of sick children absent from school who are not receiving medical attention, and in suitable cases arrange for their attendance at the Minor Ailment Clinics.

*Co-operation of Voluntary Bodies.* Voluntary organisations which are engaged in work associated with the welfare of school children are The Guild of Social Service, The National Society for the Prevention of Cruelty to Children, The Poole Post War Brotherhood, The Rotary Club, and the Round Table.

The Local Inspector of the N.S.P.C.C. is always willing to co-operate with the Department in dealing with cases of medical neglect, and carefully follows up all children reported to him, thereby rendering great assistance in dealing with difficult and careless parents. During the year the Inspector visited 29 families concerning the welfare of 70 school children and paid 133 supervision visits, with most satisfactory results. In some cases, advice only was required; in others, the parents were warned, and the families kept under supervision until the condition of the children and the homes was considered satisfactory. No prosecutions were necessary.

The Children's Holiday Fund of the Poole Post-War Brotherhood arranges Summer Camps, and, during 1933, 60 school boys were sent to Hayling Island Camp for ten days and 60 school girls were given a holiday at private homes in Christchurch for seven days. 12 children were supplied with boots and shoes, and 16 children were fitted out with other articles of clothing. The clothing and footwear were supplied to any children who through lack of these would have been unable to take advantage of the holiday



offered. These children were medically inspected by the School Medical Officer before proceeding to the holiday camps.

The Swanage Red Cross Children's Memorial Hospital received during the year nine delicate children of school age for a period of convalescence averaging 33 days, the parents contributing by arrangement.

The Poole Round Table distributed 104 pairs of footwear to deserving cases. The Poor Children's Breakfast Fund organised by the Westbourne Congregational Young Men's Class entertained 200 poor children in the Borough at a Christmas Morning Breakfast, and distributed 230 pairs of footwear.

The Poole Rotary Club has in operation a scheme whereby in necessitous cases transport is available for children on admission to or discharge from Hospital.

### **XIII. BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.**

Table III gives particulars of all exceptional children of school age in the area. A register is kept of all such children, and on a special defect card is recorded all information obtained regarding each case. New cases are ascertained by the Medical Officers in the course of their inspections, and by the School Nurses. The Attendance Officers and the teachers also notify to the Department any cases coming to their notice.

The scheme formulated in 1931 for the provision of a special day school for mentally defective children has not yet been developed, owing to the difficulty of obtaining suitable premises and to the restrictions of economy, but it is hoped that in the near future it will be possible to make special school provision for this type of defective child, whose presence in the ordinary class of the elementary school is a serious disadvantage both to himself and to the school. Either his presence is merely tolerated because of his inability to keep pace with his fellows, or his teacher ineffectively devotes to his tuition time and patience which would more profitably be spent on the advancement of the normal members of the class.

There are no special classes for dull or backward children in the Borough, but in one of the larger schools a class has been formed in which retarded children attending this school are given the individual assistance in their studies which they require. Two special classes for dullards are urgently required, one to serve the needs of the schools in the Parkstone area and one for the needs of the Poole area.

Institutional arrangements for the deaf, dumb, and blind are in force, and at present three children are at schools for the deaf, and one is at a school for the blind.

During the year 23 children were examined for mental abnormality. All these, excepting those so grossly defective as to be incapable of responding to such an examination, were tested by Burt's Revision of the Binet-Simon Tests for general intelligence and by performance tests.

Of these children 4 were notified to the Local Authority for Mental Deficiency: one as an idiot, two as imbeciles, and one feeble-minded girl as a "special circumstances" case. Of the remaining 19, 2 were found to be of average intelligence, 8 were dull or backward, or were borderline cases requiring further observation, and 9 were certified as being feeble-minded.

The necessity for the complete ascertainment of all mentally defective children in the area is clearly recognised, and efforts are being continued to discover and examine all such children, with a view to providing the education, training or care best suited to each individual case.

#### **XIV. NURSERY SCHOOLS.**

There are no nursery schools, but at most of the infant schools there are what might be described as nursery classes, where children under five are taught and cared for. In the denser parts of the Borough it is found that the majority of the children are sent to school about the age of  $3\frac{1}{2}$  to 4 years, and although from the educational point of view the wisdom of this early start may be debated, there is no doubt that the earlier a child comes under the supervision of the School Medical Service, the greater is the opportunity for the correction of existing defects.

In the nursery classes, the work is essentially very elementary, and its value is more social than educational. Some schools have made provision for a period of rest for the youngest in the afternoon, and an extension of these arrangements to all nursery classes would be beneficial.

#### **XV. SECONDARY SCHOOLS.**

The School Medical Service does not embrace the two Grammar Schools in the Borough, the routine medical inspection of the pupils of these schools being up to the present under the control of the County Council, which is the authority for Higher Education,

## XVI. PARENTS' PAYMENTS.

The Scheme of Charges for Clinic treatment based on a scale of income and approved by the Board of Education is as follows :—

*Conditions as to Free Treatment and Payments* Treatment at the Clinics is provided FREE for families where the weekly income from all sources is below the following figures :—

	No. of Children under 16 years.						
	1	2	3	4	5	6	7
Where both Parents or Guardians are alive	£1 10s.	£2	£2 10s.	£3	£3 10s.	£4	£4 10s.
Where one Parent or Guardian is alive	£1 5s.	£1 15s.	£2 5s.	£2 15s.	£3 5s.	£3 15s.	£4 5s.

For families where total weekly income is above these amounts, the following CHARGES per child are made, PAYABLE IN ADVANCE.

1. *Minor Ailments.* Free for first fortnight. Thereafter 1/- for three months' treatment.

2. *Provision of Spectacles.* Cost of spectacles.

3. *Dental Treatment* Sixpence per attendance, or 1/- for two or more necessary attendances.

4. *Tonsils and Adenoid Treatment.* Tonsils alone, 5/-. Combined treatment, 7/6.

5. *X-Ray Treatment of Ringworm,* 5/-.

The amount received in reduction of the gross cost of the School Medical Service during the years, 1930, 1931, 1932, and 1933 has been £27 15s. 0d., £29 18s. 6d., £31 3s. 0d., and £27 4s. 6d. respectively.

## XVII. HEALTH EDUCATION.

Copies of the following are in possession of all Elementary School or Department Heads :—

Handbook : "Hygiene of the Mouth and Teeth," issued by the Dental Board of the United Kingdom.

Handbook : "Suggestions on Health Education," issued by the Board of Education.

Easily assimilated books of practical advice prepared by the Health and Cleanliness Council—"Keep Fit" for boys and, "Health and Beauty" for girls—are being distributed via the School Dental Clinics to the elder children.



The School population itself shared prominently in "Health Week," talks being given by the Medical Officer of Health to the Grammar School and to all the upper standards of the Elementary Schools on "Man his own Medicine Chest," a subject which enabled the advantage of immunisation to be brought before the children in an appropriate form. The Elementary School children took part in a Prize Essay Competition on this topic. This willing co-operation of the School Staffs in the dissemination of Health information to the young has been for years a gratifying object lesson of which the Public Health Department would like to record its deep sense of appreciation.

The Scheme of Educational Propaganda, developed by the Dental Board of the United Kingdom, by which demonstrations with a portable exhibit are carried out, was taken advantage of. By this means, seventeen schools were visited, the Lady Demonstrator thus being able to give a practical talk to about 2,500 of the elder boys and girls. The addresses and demonstrations were spread over 9 days, and were much appreciated by both staff and scholars, so much so that requests were made for a repetition, which has been arranged for in 1934.

### **XVIII. FORMOL TOXOID IN DIPHTHERIA IMMUNISATION.**

BY GEORGE CHESNEY, M.B., D.P.H., Deputy Medical Officer of Health.

The practice of active immunisation against diphtheria is now accepted by the majority of Public Health Specialists as a signal advance in the progress of preventive medicine towards the ultimate elimination of epidemic incidence. At the beginning of the twentieth century, diphtheria occupied a unique position in contrast with other infectious diseases. Regarding its etiology and treatment, the store of knowledge, if not complete, was considerably in advance of that of other zymotic diseases, the causal organism being known and easily isolated, and an efficient curative agent being available; but with regard to prevention, little, if any, progress had been made, passive immunisation being but a temporary safeguard, and the ritual of isolation and disinfection having been tried and found wanting.

The discovery that the immunity of the individual depended on the presence in sufficient quantity of the specific antitoxin in the blood has led, during the past twenty years, to the prophylactic injection of various reagents as a means of stimulating the immunising mechanism of the body to the production of the protective antitoxin. The basis of these prophylactics is modified diphtheria toxin, its toxicity being reduced or eliminated by chemical treatment, or sub-neutralised by the admixture of antitoxin, and there is ample evidence that the injection of such mixtures at suitable intervals in requisite dosage has a definite protective effect. The Schick test is used as an indicator of successful immunisation, as it is generally admitted that a person who is indisputably Schick-negative will not contract diphtheria, or, in the rare event of a mass infection temporarily overcoming resistance and invasion taking place, will suffer a mild and evanescent attack only, such cases usually clearing up without the use of foreign antitoxin, as the stimulus of the toxin absorbed activates the already sensitised immunising mechanism to a rapid and generous production of protective antitoxin.

No diphtheria prophylactic yet produced has fulfilled all the criteria of the ideal antigen. These are, I suggest, (a) a complete lack of toxicity; (b) absence of any local or general reaction following injection of adult or



child; (c) effective and rapid protection in all cases as a result of a single injection. The first requirement has been attained by the replacement of toxin by toxoid (i.e. toxin which has been detoxicated by treatment with formaldehyde while retaining its immunising potency unaffected). The second requirement has yet not been completely attained, but toxoid-antitoxin, and more particularly toxoid anti-toxin floccules, are prophylactics in the use of which reactions are rarely encountered. In my own experience in some 5,000 injections of toxoid-antitoxin, I have only once encountered a disturbing reaction.<sup>1</sup> The third requirement has not yet been fulfilled by any available prophylactic, but its attainment has been approached by the use of potent formol toxoid, and there are favourable indications that the use of an alum formol toxoid, which is less rapidly eliminated by the tissues than other prophylactics, may solve the problem of single dose immunisation.

At the Poole Immunisation Clinic, which was started in October, 1929, the following prophylactics have been used: Toxoid-antitoxin, Toxoid-antitoxin Floccules, Formol Toxoid, and Alum Formol Toxoid.

#### **Toxoid-Antitoxin.**

Up to the beginning of 1933, Toxoid-antitoxin in a dosage of three injections of 1 c.c. at weekly intervals was used in the majority of cases, and was found generally satisfactory. The main disadvantages in its use are (a) the necessity for three doses, (b) the relative delay in the development of immunity, the Schick-negative state taking in some children 3 to 6 months to develop after the final dose of prophylactic, and (c) the necessity for a Schick test to determine those children who have failed to acquire immunity as a result of three injections. The suggestion that the presence of horse serum in this prophylactic would cause sensitization and give rise to possible risk in the event of a curative injection of horse serum being required at a later date has not so far been substantiated in practice.

The advantages of Toxoid-antitoxin are its lack of toxicity, its relative freedom from reactions, and its immunising efficiency in 80 to 90 per cent. of cases.

In Poole, 1,480 children have been treated with T.A.M. Of 229 primary Schick positives, the majority over 10 years of age, 90 per cent. proved Schick negative six or more months after immunisation, and of 608 children immunised without preliminary Schick-testing, 85 per cent. were found to be negative on post Schicking. This lower percentage in the younger children supports the view held by Dudley<sup>2</sup> regarding original "immunisability." All post-prophylactic positives, who were given a fourth dose of T.A.M. and were again Schick-tested proved negative.

As a general procedure, Schick-testing was not carried out in children under 10 years, as the susceptibility rate (circa 80%) was sufficiently high to justify its omission.

#### **Formol Toxoid.**

In November, 1932, the Ministry of Health, in its Memorandum on the Production of Immunity against Diphtheria, recommended the use of formol toxoid, following the findings of a conference of experts held in June, 1931, under the auspices of the Health Committee of the League of Nations.

Following the Ministry of Health's recommendation early in 1933 the routine use of toxoid-antitoxin was discontinued and formol toxoid was employed. The superior immunising efficiency of formol toxoid over other prophylactics is recognised, but its great disadvantage is its liability to cause local, and less frequently, general reactions in certain persons sensitive to some constituent of the preparation. The introduction of the Moloney test, an intradermal injection of the toxoid suitably diluted, as an indicator of such sensitive persons, solves to a great extent, the problem of the unknown and unexpected reactor, but has complicated practical procedure by the necessity for an additional intradermal test.

The subcutaneous injection of a prophylactic carried out rapidly with a fine needle is practically painless, and few children give expression to any

objection, whereas the three intradermal injections of the Moloney, Schick and control tests necessitate deliberate and careful technique and experienced interpretation of results, are difficult to perform accurately in a nervous or restless child, are relatively painful, and require inspection of the child 24 or 48 hours later for the Moloney reading, and 5 to 7 days later for the Schick reading.

The disadvantages of multiple injections in young children are obvious, so, with a view to reducing the total number of injections, and especially to obviating intradermal tests where possible, I decided to omit the Moloney test in suitable cases, and to rely on a small primary dose of the prophylactic given subcutaneously as an indicator of undue sensitiveness of the subject, this dose also serving as an initial immunizing dose.

The work of O'Brien and Parish<sup>3</sup> indicates that few children are definitely Moloney positive. In 804 persons, ranging in age from 1 to 18 years, they found that only 3.9 per cent. were definitely positive, 12.3 per cent. were mildly positive, and 83.8 per cent. were negative or faintly positive.

As in young children the percentage positive is low, sensitiveness increasing with age, one felt that, relying on a detector dose of 0.1 c.c. of the toxoid given subcutaneously, the Moloney test could safely be omitted in children under 10.

Past experience having shown that in this area over 80 per cent. of children under 10 years were Schick positive, the primary Schick test and control were not performed as a routine in children under 10, a few tests being done occasionally as a " sampler " of the Schick state of the children attending. During 1933, 39 children under 10 years were primary Schick tested, and 79.5 per cent. were positive. Since the beginning of the clinic 666 children (the majority being over ten years old) have been primary Schick tested, and the percentage positive for all ages is 77.2.

During the year, 214 children were immunised with formol toxoid. Three batches of formol toxoid were employed, Batch A, having an Lf value of 26 per c.c., being used in 37 children, Batch B, of about 24 Lf, in 76 children, and Batch C, with an Lf value of 50, being used in 101 children.

Of the 37 children treated with Batch A, 35 (of whom 14 were primary Schick positive) were given 3 doses of 0.1 c.c. (in 3 cases 0.2 c.c.), 0.5 c.c., and 1 c.c. at intervals of two weeks, and were Schick-tested 4 to 6 weeks after the third dose (31 at 4 weeks, and 4 at 6 weeks). All were found to be Schick-negative; two readings of the test were taken, the second being taken on the seventh day after the test. Of the remaining two children in this group, one was given four small doses on account of local reaction to the second dose and the other failed to attend for the third injection on account of an accident. Both were Schick-negative when tested later.

Of the 76 children immunised with Batch B, 48 (of whom 8 were primary Schick-positives) were given three doses of 0.1 (or 0.2), 0.5 and 1 c.c., and 21 (of whom 7 were primary Schick-positives), were given three doses of 0.1, 0.5, and 0.5 c.c. at fortnightly intervals. On Schick-testing 4 to 6 weeks after the final injection (33 being tested after 4 weeks and 36 after 6 weeks), all were found to be Schick-negative. The remaining 7 children reacted to the second dose of toxoid, and were not given a third dose. On subsequent Schick-testing, they were all found to be negative.

Thus, of 113 children treated with a formol toxoid of an Lf value of 24 to 26, all proved Schick-negative, the Schick negative state being attained in the majority within 8 weeks from the commencement of immunisation. That 100 per cent. should give negative Schick readings within two months of commencing injections with a total dosage not exceeding 1.6 c.c. formol toxoid, indicates the high immunising efficiency of the prophylactic given in 3 graduated doses.

That two doses of an equivalent Lf value were not so effective is shown by the following results of Batch C. The Lf value of this batch was 50 per c.c., so that a total dosage of about .8 c.c. was equal in antigenic dosage to approxi-



mately 1.6 c.c. of batches A and B. 101 children were given two doses at intervals of from 3 to 4 weeks, 61 cases receiving doses of 0.1 and 0.4 (or 0.5) c.c., and 40 being given doses of 0.2 and 0.5 (or 0.6) c.c. Of the 101 children, 98 were post-prophylactic Schick-tested, and 76 were found to be completely Schick-negative, giving a percentage of 77.5 immune, against 100 per cent. immune in batches A and B. The post Schick-tests were performed in the majority of cases 4 to 6 weeks after the 2nd injection, a few children who failed to attend for the test when requested being tested at a later date.

Of the 22 who were recorded as post-Schick-positive, 6 were definitely positive, 10 were weakly positive, and 6 were doubtful negatives, but were recorded as positive, no reading which gave the slightest indication of redness or dissimilarity to the control being accepted as negative. In four of these cases, who ten weeks previously on primary test had given a positive, the contrast of the ill-defined post-prophylactic positive with the still well-marked staining of the well-defined primary positive reaction was striking. More striking were the absolute negative reactions contrasted with the persistent staining of positive reactions obtained eight to ten weeks previously.

In this investigation I adopted a complete absence of reaction, as above described, as indicating the 'Schick-negative' condition. It is obvious that of the 22 recorded as "positive" only 6 failed to develop immunity, the reduction of reaction in the others showing clearly that the body cells had already responded to the injection of prophylactic by manufacturing anti-toxin.

It is unwise to draw conclusions from the results of a comparatively small number of cases, but my results would at least suggest that formol toxoid is more efficient when given in three doses than in two, even though the total Lf value of the antigen given in two doses is approximately the same as that given in three doses. Of the 211 children immunised with formol toxoid, and post-Schicked, 113 were given a dosage expressed in Lf value of from 26 to 46 in three doses, and 100 per cent. read Schick negative on test, whereas of 98 who were given a dosage of 25 to 40 Lf in two doses only 77.5 were found to be completely Schick negative. As the children were "unselected," and were from the elementary school population it may be taken that they were of the same level of "immunisability."

#### **Alum Formol Toxoid.**

This prophylactic, which by reason of its slow rate of absorption and elimination may prove of higher immunizing value than formol toxoid, was used towards the end of the year in 12 cases, of whom 11 were primary Schick positive.

Doses of 0.1 c.c. and 0.5 c.c. were given at 2 weeks interval and a post Schick was done 4 weeks after the second injection. 11 children gave negative readings, and one was weakly positive.

No reactions of note were encountered, and no appreciable induration was noted. In 1931 an alum toxoid was used in 34 cases, and gave good immunising results, but its liability to cause local reactions and persistent induration was sufficient reason for discontinuing its use. In one case a small sterile abscess formed at the site of injection. Saunders<sup>4</sup> reported 4 cases of abscess formation in 579 children immunized with a similar alum toxoid. Compared with the alum toxoid used in 1931, alum formol toxoid appears to be much less liable to reaction and induration and to have a higher immunising potency, but the small number treated does not warrant further comment. 5 cases (4 of whom were primary positive) were immunised with a "detector" dose of alum formol toxoid and a final dose of formol toxoid, the interval between being 4 weeks. All proved Schick negative on test a few weeks later.

#### **Toxoid Anti-toxin Floccules.**

This prophylactic, which is superior to T.A.M. but inferior to F.T. in immunising efficiency, was used only in cases in which definite sensitiveness to formol toxoid was encountered. In three such cases, which reacted

sharply to the small initial "detector" dose of F.T., the immunisation was completed with doses of 1 c.c. T.A.F. without any resultant reaction or discomfort.

#### **Moloney Tests.**

During the year 82 children, of whom 52 were over 8 years, were Moloney tested prior to immunisation. Of these 8 (9.7%) were positive, 13 were doubtful positive and were dealt with as negative, and 61 were negative. The 8 positives were all over 8 years old. Of 40 Schick-positive Moloney-tested, 25 of whom were over 8 years, 1 (2.5%) was positive, 7 were doubtful positive, and 32 were negative, and of 19 Schick-negatives, Moloney-tested, 16 of whom were over 8 years, 7 (36.8%) were positive, 2 doubtful, and 10 negative.

It is to be expected that persons who have had natural immunising contact with the products of the diphtheria bacillus will be found to be more sensitive to the toxoid than those who, as indicated by their Schick-positive state have not had such contact. In connection with Schick and Moloney tests it may be of interest to record that, in several children who were Schick and Moloney tested on the same day, there was a delay in the appearance of the Schick positive reaction until the 5th day. This delay beyond the 4th day had not been previously observed by me in cases Schick-tested only. It may be that the Moloney test has some influence in tending to delay the appearance of the positive Schick. The necessity for a reading of the Schick at least six days after the test is indicated.

During the year an attempt was made to combine the Moloney and Schick test in one intradermal injection, using the Schick test dose and Moloney test dose combined in 0.2 c.c. It was hoped that as the Moloney test shows up generally in 24 hours and as the Schick test positive usually makes its appearance after 48 hours, it would be possible to note a positive Moloney and after it had faded to record a positive Schick. 27 tests were done, Moloney and Schick tests being performed as controls in addition to the combined Schick and Moloney test. The results were inconclusive, as a considerable number of the Schick-positives showed up faintly in 24 hours, thereby interfering with the reading of the Moloney test.

#### **Reactions with Formol Toxoid.**

Few reactions worthy of note were observed, and as the parents had been advised that in a certain proportion of children some redness at the site of injection might be expected, the occurrence of a local reaction was accepted as a negligible concomitant of the immunization, if not an actual advantage.

The initial "detector" dose gave ample indication of sensitive cases, and the second dose was accordingly reduced, or a change to T.A.F. was made.

The parents were requested to present the child for inspection on the day following the injection of the "detector" dose if there was any redness or tenderness of the arm at the site of injection, so that the reaction could be noted and subsequent dosage determined.

Out of 214 children immunised with formol toxoid, 18 showed well-defined reactions, varying in diameter from 3 to 8 cm. with some tenderness, and 21 showed slight redness, less than 3 cm. in diameter, without tenderness or discomfort, the majority of the reactions occurring in children over 8 years.

Of the 18 definite reactors, three, aged 8, 10 and 12, who previously had been found to be Moloney positive, reacted sharply to the initial "detector" dose, and immunisation was completed with T.A.F. The remaining 15 reacted to the second dose. In some of these, a very slight reaction was noted with the "detector" dose, but was not considered sufficient reason for changing over to T.A.F. The 21 children who were noted as having reacted slightly were recorded as reactors because a slight reaction was *visible*, but no discomfort or inconvenience was reported. The majority of these occurred with the second dose of antigen.

In three children who had been Moloney tested and recorded as negative, slight reactions were observed.



In all cases, the reactions settled down within 48 hours, and in only 4 cases was any constitutional disturbance observed or reported.

#### Summary.

Since the commencement of the Immunisation Clinic in October, 1929, 1,913 persons have been dealt with, 1,753 being immunised and 160 being found primary Schick negative. Of the 1,753 immunised, 1,208 were post-Schicked, 1,068 being found negative and 140 positive, giving 88.4 per cent. negative on post-Schick test.

During 1933, 301 persons were dealt with, 262 being immunised and 39 being found primary Schick negative. Of the 262 immunised, all but nine were post-Schick tested, giving a percentage of 96.5 post-Schicked. This high percentage of post-Schick tests is very gratifying, and is a definite indication of the willing co-operation and interest of the parents in the protection of their children.

Of the 262 children given prophylactic injections, 23 were immunised with toxoid antitoxin, 214 with formol toxoid, 12 with alum formol toxoid, 5 with formol toxoid and alum formol toxoid, 3 with formol toxoid and toxoid antitoxin floccules, and 5 were incomplete at the year end.

From my observations in these 214 cases treated with formol toxoid, I would suggest that in children under 8 years the Moloney test can safely be omitted, and that 0.1 c.c. of a toxoid of high antigenic value can be used as an initial immunising dose and also as a detector of undue sensitiveness. In children over 8 years, it may be preferable to do a Moloney test.

In non-reactors, two doses of 0.5 c.c. formol toxoid, following the initial dose at two-weekly intervals, will give a high percentage of Schick negatives four to six weeks after the final injection.

In those who react to the initial dose, it would be advisable to continue the immunisation with toxoid-antitoxin floccules.

This simplified method of procedure would permit of the omission of the Moloney and Schick tests in children under 8 years, and of rapid immunisation by three small doses of potent formol toxoid, with a resultant high percentage of post-Schick negatives, the success of any antigen in immunisation being judged by its efficiency in rapidly producing, with a minimum dosage and without reaction, the Schick negative state.

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#### REFERENCES.

1. Chesney, G. : Brit. Med. Journal, 1933, 15th July, p.98.
2. Dudley, S. F. : Quar. Journ. Med. 1932, I. 213.
3. O'Brien and Parish, Lancet, 1932. 23rd July, p. 176.
4. Saunders, J. C. : Lancet, 1933. 15th April, p.791.

## XIX. MISCELLANEOUS.

During the year, 126 children were examined under the Employment of Children Act, 1903, as amended by the Education Act, 1918, regarding their physical fitness for part-time employment. The majority of these children are engaged in newspaper delivery. Four children were rejected as unfit.

The following extracts from the Juvenile Employment Committee's Report for the year ending 31st July, 1933, indicate its valuable co-ordinating work between school life and the labour market.

"The Committee is authorised by the Poole Borough Council to advise and help boys and girls from the ages of 14 to 18 years in choice of suitable employment and to assist, where required, on all matters relating to their industrial welfare."

"All Departments in Schools are visited towards the end of each leaving period, when the Leavers are interviewed and particulars taken of employment desired. Thus close personal co-operation is maintained with all Head Teachers. When children have left School they are followed up by an After Care Visitor, who reports to the Bureau whether the child is in work and if any further action is required. The child's name is kept on a list if he is not in satisfactory employment, or only in temporary work."

The Report shows that during the year 611 vacancies, of which 67 were ultimately cancelled, were notified to the Bureau. Of the available 544 vacancies, 541 were filled, 260 boys and 281 girls being placed in employment.

57 boys were employed as errand boys, 46 as pottery workers, and other posts filled were garden boys, factory workers, labourers, van-boys, brick and timber workers. 33 girls found work as resident and 85 as daily maids, and 42 were placed as shop assistants. Others were employed as laundry, pottery and factory workers, and as shop apprentices. The number of elementary school leavers during this period was 443 (235 boys and 208 girls), an increase of 43 on the figure for 1932, which was the lowest recorded for several years.

*Irregular Attendances.* Under the School Attendance Bye-laws 47 appearances were made before the magistrates. Fines were inflicted in 30 cases. Some unsatisfactory cases are included more than once in these figures.



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**Table I.**  
**RETURN OF MEDICAL INSPECTION.**

**A. Routine Medical Inspections.**

Number of Code Group Inspections			
Entrants	...	...	706
Second Age Group	...	...	428
Third Age Group	...	...	787
Total			1921
Number of Other Routine Inspections			
	...	...	Nil

**B. Other Inspections.**

Number of Special Inspections	...	2892
Number of Re-inspections	...	4345
Total		7237



TABLE II.

## A. Return of Defects found by Medical Inspection in the Year Ended 31st December, 1933.

DEFECT OR DISEASE.					Routine Inspections		Special Inspections.	
					No. of Defects.		No. of Defects.	
					Re- quir- ing treat- ment	Requiring to be kept under ob- servation, but <i>not</i> requiring treatment.	Re- quir- ing treat- ment	Requiring to be kept under ob- servation, but <i>not</i> requiring treatment.
SKIN	Malnutrition	...	...	...	26	112	3	—
	Ringworm :	...	...	...				
	Scalp	...	...	...	—	—	11	—
	Body	...	...	...	—	—	12	—
	Scabies	...	...	...	1	—	26	—
	Impetigo	...	...	...	4	—	16	—
	Other Diseases (Non-Tuberculous)	...	...	...	12	—	123	15
EYE	Blepharitis	...	...	...	10	—	33	—
	Conjunctivitis	...	...	...	9	—	18	—
	Keratitis	...	...	...	2	—	1	—
	Corneal Opacities	...	...	...	1	—	1	4
	Defective Vision (excluding squint)	...	...	...	109	—	104	2
	Squint	...	...	...	25	—	20	—
	Other Conditions	...	...	...	2	3	31	3
EAR	Defective Hearing	...	...	...	3	—	3	—
	Otitis Media	...	...	...	11	—	34	1
	Other Ear Diseases	...	...	...	1	—	20	1
	Enlarged Tonsils Only	...	...	...	146	2	44	4
NOSE AND THROAT	Adenoids only	...	...	...	16	7	19	2
	Enlarged Tonsils and Adenoids	...	...	...	17	2	121	2
	Other Conditions	...	...	...	9	11	103	1
	Enlarged Cervical Glands (Non-Tuberculous)	...	...	...	35	41	26	2
	Defective Speech	...	...	...	24	—	1	—
HEART AND CIRCULA- TION	Heart Disease :	...	...	...				
	Organic	...	...	...	8	4	1	1
	Functional	...	...	...	25	9	2	—
LUNGS	Anaemia	...	...	...	13	—	2	—
	Bronchitis	...	...	...	31	2	9	1
	Other Non-Tuberculous Diseases	...	...	...	16	—	1	—
	Pulmonary :	...	...	...				
TUBER- CULOSIS	Definite	...	...	...	—	—	—	—
	Suspected	...	...	...	—	—	5	—
	Non-Pulmonary :	...	...	...				
	Glands	...	...	...	—	—	2	6
	Spine	...	...	...	—	—	—	1
	Hip	...	...	...	—	—	—	—
	Other Bones and Joints	...	...	...	1	1	—	1
	Skin	...	...	...	—	1	—	1
NERVOUS SYSTEM	Other Forms	...	...	...	1	—	—	—
	Epilepsy	...	...	...	3	1	1	1
	Chorea	...	...	...	2	—	2	—
	Other Conditions	...	...	...	9	4	9	2
DEFORM- ITIES	Rickets	...	...	...	4	3	1	1
	Spinal Curvature	...	...	...	10	—	1	3
	Other Forms	...	...	...	15	5	3	4
Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)					52	8	893	56



STANDARD OF WEIGHTS		STANDARD OF LENGTH	
UNIT	WEIGHT	UNIT	LENGTH
POUND	1	FOOT	1
POUND	2	FOOT	2
POUND	3	FOOT	3
POUND	4	FOOT	4
POUND	5	FOOT	5
POUND	6	FOOT	6
POUND	7	FOOT	7
POUND	8	FOOT	8
POUND	9	FOOT	9
POUND	10	FOOT	10
POUND	11	FOOT	11
POUND	12	FOOT	12
POUND	13	FOOT	13
POUND	14	FOOT	14
POUND	15	FOOT	15
POUND	16	FOOT	16
POUND	17	FOOT	17
POUND	18	FOOT	18
POUND	19	FOOT	19
POUND	20	FOOT	20
POUND	21	FOOT	21
POUND	22	FOOT	22
POUND	23	FOOT	23
POUND	24	FOOT	24
POUND	25	FOOT	25
POUND	26	FOOT	26
POUND	27	FOOT	27
POUND	28	FOOT	28
POUND	29	FOOT	29
POUND	30	FOOT	30
POUND	31	FOOT	31
POUND	32	FOOT	32
POUND	33	FOOT	33
POUND	34	FOOT	34
POUND	35	FOOT	35
POUND	36	FOOT	36
POUND	37	FOOT	37
POUND	38	FOOT	38
POUND	39	FOOT	39
POUND	40	FOOT	40
POUND	41	FOOT	41
POUND	42	FOOT	42
POUND	43	FOOT	43
POUND	44	FOOT	44
POUND	45	FOOT	45
POUND	46	FOOT	46
POUND	47	FOOT	47
POUND	48	FOOT	48
POUND	49	FOOT	49
POUND	50	FOOT	50
POUND	51	FOOT	51
POUND	52	FOOT	52
POUND	53	FOOT	53
POUND	54	FOOT	54
POUND	55	FOOT	55
POUND	56	FOOT	56
POUND	57	FOOT	57
POUND	58	FOOT	58
POUND	59	FOOT	59
POUND	60	FOOT	60
POUND	61	FOOT	61
POUND	62	FOOT	62
POUND	63	FOOT	63
POUND	64	FOOT	64
POUND	65	FOOT	65
POUND	66	FOOT	66
POUND	67	FOOT	67
POUND	68	FOOT	68
POUND	69	FOOT	69
POUND	70	FOOT	70
POUND	71	FOOT	71
POUND	72	FOOT	72
POUND	73	FOOT	73
POUND	74	FOOT	74
POUND	75	FOOT	75
POUND	76	FOOT	76
POUND	77	FOOT	77
POUND	78	FOOT	78
POUND	79	FOOT	79
POUND	80	FOOT	80
POUND	81	FOOT	81
POUND	82	FOOT	82
POUND	83	FOOT	83
POUND	84	FOOT	84
POUND	85	FOOT	85
POUND	86	FOOT	86
POUND	87	FOOT	87
POUND	88	FOOT	88
POUND	89	FOOT	89
POUND	90	FOOT	90
POUND	91	FOOT	91
POUND	92	FOOT	92
POUND	93	FOOT	93
POUND	94	FOOT	94
POUND	95	FOOT	95
POUND	96	FOOT	96
POUND	97	FOOT	97
POUND	98	FOOT	98
POUND	99	FOOT	99
POUND	100	FOOT	100

1912

**B. Number of INDIVIDUAL CHILDREN Found at ROUTINE Medical Inspection to Require Treatment (Excluding Uncleanliness and Dental Diseases).**

GROUP.	NUMBER OF CHILDREN.		Percentage of Children found to require Treatment.
	Inspected.	Found to require Treatment.	
CODE GROUPS :—			
Entrants	706	244	34.6
Second Age Group	428	135	31.5
Third Age Group	787	192	24.4
Total (Code Groups)	1921	571	29.7
Other Routine Inspections	—	—	—

TABLE OF PROPOSED CHANGES TO THE PROPOSED CHARTER OF THE  
 BOARD OF THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Section of Charter, and Section of Proposed Amendment	Section of Charter to be amended (Section 1)	Section of Proposed Amendment (Section 2)	Section of Proposed Amendment (Section 3)
Section 1.1 Section 1.2 Section 1.3	Section 1.1 Section 1.2 Section 1.3	Section 1.1 Section 1.2 Section 1.3	Section 1.1 Section 1.2 Section 1.3
Section 1.4 Section 1.5 Section 1.6	Section 1.4 Section 1.5 Section 1.6	Section 1.4 Section 1.5 Section 1.6	Section 1.4 Section 1.5 Section 1.6

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

Children Suffering from Multiple Defects

Blindness (NOT Partial Blindness); Deafness (NOT Partial Deafness); Mental Defect; Epilepsy;  
Active Tuberculosis; Crippling; Heart Disease.

Number of children suffering from any combination of the above defects ... 2

Blind Children.

At Certified Schools for the Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total	
1	1	—	—	2	
Partially Blind Children.					
At Certified Schools for the Blind.	At Certified Schools for the Partially Blind.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	1	—	1	2
Deaf Children.					
At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.	
3	2	—	—	5	
Partially Deaf Children.					
At Certified Schools for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	—	—	—	—	—
Mentally Defective Children. (Feeble-Minded Children).					
At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.	
3	28	—	2	33	
Epileptic Children. Children Suffering from Severe Epilepsy.					
At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.	
1	2	—	1	4	
Physically Defective Children A. Tuberculous Children. I.—CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS. (Including pleura and intra-thoracic glands).					
At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.	
—	4	—	2	6	
II.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS.					
At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.	
—	10	—	4	14	
B. Delicate Children.					
At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total	
—	129	—	—	129	
C. Crippled Children.					
At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.	
—	15	2	6	23	
D. Children With Heart Disease.					
At Certified Special Schools	At Public Elementary Schools	At other Institutions.	At no School or Institution	Total	
—	11	—	4	15	



# ALL DATA

DATA SET 1: A STUDY OF THE EFFECTS OF

STRESS ON THE HUMAN BODY

STRESS - a state of mind or body that is caused by external or internal factors that are perceived as threatening or challenging.

STRESSORS - factors that cause stress, such as work, family, health, and environment.

STRESS RESPONSE - the body's reaction to stress, which can be physical, emotional, or behavioral.

STRESS MANAGEMENT

STRESS MANAGEMENT - the process of identifying, understanding, and controlling stressors to reduce the negative effects of stress on the body and mind.

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TABLE IV.

Return of Defects Treated during the year ended 31st December, 1933.

## TREATMENT TABLE.

## GROUP I.—MINOR AILMENTS (excluding Uncleanliness, for which see Group V.)

Disease or Defect.  (1)	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme (2)	Otherwise (3)	Total (4)
SKIN :—			
Ringworm-Scalp ... ..	11	—	11
Ringworm-Body ... ..	12	—	12
Scabies ... ..	26	—	26
Impetigo ... ..	16	—	16
Other Skin Disease ... ..	123	—	123
MINOR EYE DEFECTS :—			
(External and other, but excluding cases falling in Group II) ... ..	84	—	84
MINOR EAR DEFECTS :— ... ..	57	—	57
MISCELLANEOUS :— ... .. (e.g. minor injuries, bruises, sores, chilblains, etc.)	779	65	844
Total ... ..	1108	65	1173

## GROUP II.—DEFECTIVE VISION AND SQUINT (Excluding Minor Eye Defects treated as Minor Ailments—Group I).

Defect or Disease.  (1)	No. of Defects dealt with.			
	Under the Authority's Scheme (2)	Submitted to refraction by pri- vate practitioner or at Hospital apart from the Authority's Scheme. (3)	Otherwise (4)	Total (5)
Errors of Refraction (including Squint)	175	—	—	175
Other Defect or Disease of the Eyes (excluding those recorded in Group I)	15	—	—	15
Total ... ..	190	—	—	190

Total number of children for whom spectacles were prescribed :—

(a) Under the Authority's Scheme ... ..	129
(b) Otherwise ... ..	—

Total number of children who obtained or received spectacles :—

(a) Under the Authority's Scheme ... ..	100
(b) Otherwise ... ..	—





TABLE IV.—continued.

## GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

NUMBER OF DEFECTS.				
Received Operative Treatment.			Received other forms of Treatment.	Total number treated.
Under the Authority's Scheme, in Clinic or Hospital.	By Private Practitioner or Hospital apart from the Authority's Scheme	Total		
(1)	(2)	(3)	(4)	(5)
129	63	192	167	359

## GROUP IV.—DENTAL DEFECTS.

(1) Number of Children who were :—			(2) Hours devoted to :—		
(a) Inspected by the Dentist :			Inspection - 141		
Aged :			Treatment - 396		
			} Total—537		
Routine Age Groups	5—545	} Total—6615	(3) Attendances made by children for treatment—1746		
	6—751		(4) Fillings :—		
	7—711		Permanent Teeth 485		
	8—736		Temporary Teeth 50		
	9—769		} Total—535		
	10—785		(5) Extractions :—		
	11—773		Permanent Teeth 518		
	12—770		Temporary Teeth 2842		
13—690		} Total—3360			
14— 85		(6) Administrations of general anaesthetics for extractions, Gas 873			
Specials ... Nil			Chloroform ... 2		
Grand Total 6615			(7) Other operations :—		
(b) Found to require treatment 3379			Permanent Teeth —		
(c) Actually treated ... 1746			Temporary Teeth —		
			} Total —		

## GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(1)	Average number of visits per school made during the year by the School Nurses	11
(2)	Total number of examinations of children in the Schools by School Nurses	36203
(3)	Number of individual children found unclean	359
(4)	Number of children cleansed under arrangements made by the Local Education Authority—	
(5)	Number of cases in which legal proceedings were taken :—	
(a)	Under the Education Act, 1921	—
(b)	Under School Attendance Byelaws	7



# TABLE 17 - SUMMARY OF DATA BY STATE

State	Number of cases	Number of deaths	Number of recoveries
Alabama	1,234	56	1,178
Alaska	12	1	11
Arizona	2,345	123	2,222
Arkansas	3,456	178	3,278
California	12,345	678	11,667
Colorado	4,567	234	4,333
Connecticut	5,678	289	5,389
Delaware	678	34	644
District of Columbia	789	45	744
Florida	8,901	456	8,445
Georgia	9,012	467	8,545
Hawaii	101	5	96
Idaho	112	6	106
Illinois	11,234	589	10,645
Indiana	12,345	678	11,667
Iowa	13,456	789	12,667
Kansas	14,567	890	13,677
Kentucky	15,678	901	14,777
Louisiana	16,789	912	15,877
Maine	17,890	923	16,967
Maryland	18,901	934	17,967
Massachusetts	19,012	945	18,067
Michigan	20,123	956	19,167
Minnesota	21,234	967	20,267
Mississippi	22,345	978	21,367
Missouri	23,456	989	22,467
Montana	24,567	990	23,577
Nebraska	25,678	991	24,687
Nevada	26,789	992	25,797
New Hampshire	27,890	993	26,897
New Jersey	28,901	994	27,907
New Mexico	29,012	995	28,017
New York	30,123	996	29,127
North Carolina	31,234	997	30,237
North Dakota	32,345	998	31,347
Ohio	33,456	999	32,457
Oklahoma	34,567	1,000	33,567
Oregon	35,678	1,001	34,677
Pennsylvania	36,789	1,002	35,787
Rhode Island	37,890	1,003	36,887
South Carolina	38,901	1,004	37,897
South Dakota	39,012	1,005	38,907
Tennessee	40,123	1,006	39,917
Texas	41,234	1,007	40,927
Utah	42,345	1,008	41,937
Vermont	43,456	1,009	42,947
Virginia	44,567	1,010	43,957
Washington	45,678	1,011	44,967
West Virginia	46,789	1,012	45,977
Wisconsin	47,890	1,013	46,987
Wyoming	48,901	1,014	47,997

## TABLE 18 - SUMMARY OF DATA BY STATE

State	Number of cases	Number of deaths	Number of recoveries
Alabama	1,234	56	1,178
Alaska	12	1	11
Arizona	2,345	123	2,222
Arkansas	3,456	178	3,278
California	12,345	678	11,667
Colorado	4,567	234	4,333
Connecticut	5,678	289	5,389
Delaware	678	34	644
District of Columbia	789	45	744
Florida	8,901	456	8,445
Georgia	9,012	467	8,545
Hawaii	101	5	96
Idaho	112	6	106
Illinois	11,234	589	10,645
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Iowa	13,456	789	12,667
Kansas	14,567	890	13,677
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Louisiana	16,789	912	15,877
Maine	17,890	923	16,967
Maryland	18,901	934	17,967
Massachusetts	19,012	945	18,067
Michigan	20,123	956	19,167
Minnesota	21,234	967	20,267
Mississippi	22,345	978	21,367
Missouri	23,456	989	22,467
Montana	24,567	990	23,577
Nebraska	25,678	991	24,687
Nevada	26,789	992	25,797
New Hampshire	27,890	993	26,897
New Jersey	28,901	994	27,907
New Mexico	29,012	995	28,017
New York	30,123	996	29,127
North Carolina	31,234	997	30,237
North Dakota	32,345	998	31,347
Ohio	33,456	999	32,457
Oklahoma	34,567	1,000	33,567
Oregon	35,678	1,001	34,677
Pennsylvania	36,789	1,002	35,787
Rhode Island	37,890	1,003	36,887
South Carolina	38,901	1,004	37,897
South Dakota	39,012	1,005	38,907
Tennessee	40,123	1,006	39,917
Texas	41,234	1,007	40,927
Utah	42,345	1,008	41,937
Vermont	43,456	1,009	42,947
Virginia	44,567	1,010	43,957
Washington	45,678	1,011	44,967
West Virginia	46,789	1,012	45,977
Wisconsin	47,890	1,013	46,987
Wyoming	48,901	1,014	47,997

## TABLE 19 - SUMMARY OF DATA BY STATE

State	Number of cases	Number of deaths	Number of recoveries
Alabama	1,234	56	1,178
Alaska	12	1	11
Arizona	2,345	123	2,222
Arkansas	3,456	178	3,278
California	12,345	678	11,667
Colorado	4,567	234	4,333
Connecticut	5,678	289	5,389
Delaware	678	34	644
District of Columbia	789	45	744
Florida	8,901	456	8,445
Georgia	9,012	467	8,545
Hawaii	101	5	96
Idaho	112	6	106
Illinois	11,234	589	10,645
Indiana	12,345	678	11,667
Iowa	13,456	789	12,667
Kansas	14,567	890	13,677
Kentucky	15,678	901	14,777
Louisiana	16,789	912	15,877
Maine	17,890	923	16,967
Maryland	18,901	934	17,967
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Michigan	20,123	956	19,167
Minnesota	21,234	967	20,267
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Nebraska	25,678	991	24,687
Nevada	26,789	992	25,797
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New Jersey	28,901	994	27,907
New Mexico	29,012	995	28,017
New York	30,123	996	29,127
North Carolina	31,234	997	30,237
North Dakota	32,345	998	31,347
Ohio	33,456	999	32,457
Oklahoma	34,567	1,000	33,567
Oregon	35,678	1,001	34,677
Pennsylvania	36,789	1,002	35,787
Rhode Island	37,890	1,003	36,887
South Carolina	38,901	1,004	37,897
South Dakota	39,012	1,005	38,907
Tennessee	40,123	1,006	39,917
Texas	41,234	1,007	40,927
Utah	42,345	1,008	41,937
Vermont	43,456	1,009	42,947
Virginia	44,567	1,010	43,957
Washington	45,678	1,011	44,967
West Virginia	46,789	1,012	45,977
Wisconsin	47,890	1,013	46,987
Wyoming	48,901	1,014	47,997

TABLE V.

Statistics of Attendance, etc.

School		Recognised Accommodation	Average number on register	Average Attendance	Percentage
COUNCIL SCHOOLS.					
Lagland Street	Infants' Department	394	303	272	89.1
Hamworthy	Mixed & Infants' "	540	575	521	90.6
Branksome Heath	Boys' "	280	293	280	95.6
"	Girls' "	303	301	281	93.4
"	Infants' "	303	345	303	87.8
Heatherlands	Boys' "	312	298	272	91.3
"	Girls' "	300	333	308	92.5
"	Infants' "	300	267	227	85.0
Oakdale	Mixed "	410	410	376	91.7
Courthill	Mixed "	400	394	368	93.4
"	Infants' "	250	184	156	84.8
South Road	Boys' "	290	275	260	94.5
"	Girls' "	290	243	232	95.5
Martin Road	Mixed & Infants' "	320	334	304	91.0
Broadstone	Mixed & Infants' "	207	203	185	91.1
NON-PROVIDED SCHOOLS.					
St. Aldhelm's	Boys' "	232	240	214	89.2
"	Girls' & Infants' "	419	356	319	89.6
Parkstone C. of E.	Mixed "	382	332	308	92.8
"	Infants' "	140	119	104	87.4
Longfleet	Boys' "	240	247	233	94.3
"	Girls' "	164	174	161	92.5
"	Infants' "	164	171	148	86.5
Poole C. of E.	Boys' "	279	238	223	93.7
"	Girls' "	243	201	180	89.5
"	Infants' "	120	121	103	85.1
St. Mary's R.C.	Mixed & Infants' "	103	130	114	87.7
Canford Village C. of E.	Mixed & Infants' "	120	70	65	92.8
Russell-Cotes' Nautical School	Boys' "	70	78	73	93.6
Total	...	7575	7235	6590	91.1

